ING

# ING Group
# Annual Report 2019

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# ING at a glance

**Market leaders:**
Netherlands, Belgium, Luxembourg

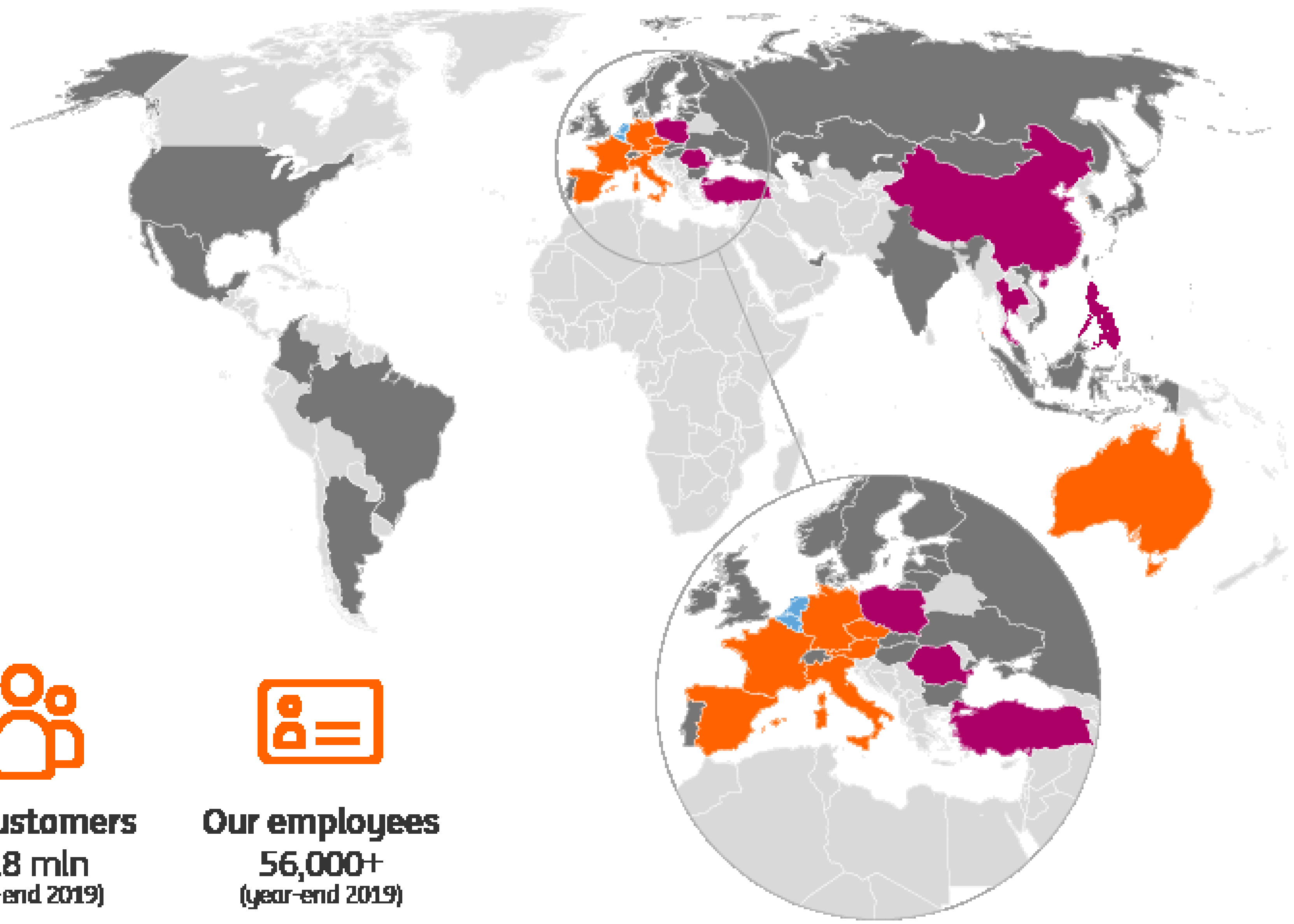
- Leading retail and wholesale banks
- Cross-border customer interaction platform with mobile-first customer experience and cost efficiency

**Challengers:**
Australia, Austria, Czech Republic, France, Germany, Italy, Spain

- Digital bank developing scalable platform with uniform, mobile-first customer experience
- Broadening product capabilities

**Our customers**
38.8 mln
(year-end 2019)

**Our employees**
56,000+
(year-end 2019)



**Growth Markets:**
Poland, Romania, Turkey, the Philippines and our stakes in Asia

- Universal banks in economies with high growth potential
- Developing differentiating customer experience based on mobile-first approach

**Wholesale Banking:**
Network and global franchises

- International network: active in more than 40 countries
- Extensive international client base across all regions
- Sector-focused client business in lending, capital structuring and advisory, transaction services and financial markets

# Performance highlights 2019

## Non-financial figures 2019

### Net Promoter Score Retail Banking[1]
(number of countries with number one ranking, rolling average)

2018 7 2017 7

**7**

### Total number of Retail Banking primary relationships
(year-end)

2018 12.5 2017 11.4

**13.3** million

### Climate Finance[2]
(lending outstanding, year-end)

2018 16.5 2017 14.6

**€18.7** billion

### Social Impact Finance[2]
(lending outstanding, year-end)

2018 0.8 2017 0.5

**€0.7** billion

### Sustainable Investment services
(year-end)

2018 6.3 2017 4.8

**€9.3** billion

### Number of customers that felt financially empowered[1]

2018 25.0 2017 25.4

**25.9** million

### Underlying Human Capital Return on Investment indicator[3]

2018 2.51 2017 2.51

**2.38**

### Retail Banking system availability in the Netherlands and Belgium[1]

2018 99.7 2017 99.7

**99.7%**

### Wholesale Banking system availability[1]

2018 99.9 2017 100

**99.9%**

## Consolidated results 2019

### Net result attributable to ING Group's shareholders

2018 4,703 2017 4,905

**€4,781** million

### Underlying net result Banking[3]

2018 5,389 2017 4,957

**€4,781** million

### Underlying result before taxation Banking[3]

2018 7,524 2017 7,199

**€6,834** million

### of which underlying income[3]

2018 18,088 2017 17,704

**€18,306** million

### of which underlying operating expenses[3]

2018 9,907 2017 9,829

**€10,353** million

### of which addition to loan loss provision

2018 656 2017 676

**€1,120** million

# Performance highlights 2019

## Balance sheet

| Total assets (year-end) | Shareholders' equity (year-end) | Customer lending[4] (year-end) | Customer deposits (year-end) | Risk-weighted assets (year-end) |
|---|---|---|---|---|
| 2018 887 2017 846 | 2018 50,9 2017 50,4 | 2018 597 2017 574 | 2018 556 2017 540 | 2018 314 2017 310 |
| €892 billion | €53.8 billion | €616 billion | €574 billion | €326 billion |

## Our financial goals

| Common equity Tier 1 ratio ING Group | Leverage ratio ING Group[5] | Underlying return on equity ING Group[3] | Underlying cost/ income ratio[3] | Dividend per share |
|---|---|---|---|---|
| 2018 14.5 2017 14,7 | 2018 4.4 2017 4.7 | 2018 11.2 2017 10.2 | 2018 54.8 2017 55.5 | 2018 0.68 2017 0.67 |
| 14.6% | 4.6% | 9.4% | 56.6% | €0.69 |
| ~13.5 % (Basel IV) ⦿ | > 4% ⦿ | 10-12% ⦿ | 50-52% ⦿ | Progressive dividend ⦿ |

## Share information

| Net result per share | Shareholders' equity per share (end of period) | Price/earnings ratio | Price/book ratio (end of period) |
|---|---|---|---|
| 2018 1.21 2017 1.26 | 2018 13.09 2017 12.97 | 2018 7.8 2017 12.1 | 2018 0.72 2017 1.18 |
| €1.23 | €13.80 | 8.7 | 0.77 |

1 Subject to reasonable assurance by KPMG. Throughout the report indicated with an Ⓐ. See 'Independent auditor's assurance report', page 89.
2 A description of ING's Climate Finance and Social Impact Finance, see www.ing.com.
3 Underlying figures are non-GAAP measures. These are derived from figures according to IFRS-EU by excluding the impact from special items and Insurance Other. See page 446 for a reconciliation between GAAP and non-GAAP figures.
4 Customer lending is defined as: loans & advances to customers -/- provision for loan losses.
5 The leverage ratio of ING Group according to the Delegated Act (including grandfathered securities) takes into account the impact of grossing up the notional cash pool activities.
⦿ Financial ambitions

## Financial review

+2%

### Net result ING Group

ING recorded a 2019 net result of €4.8 billion, an increase of 2% from €4.7 billion in 2018, which had been negatively affected by the €775 million settlement agreement with the Dutch authorities on regulatory issues. Commercial performance was robust in 2019, further evidenced by an increase in the number of primary retail customers of more than 830,000 to 13.3 million.

-11%

### Underlying net result Banking[3]

The underlying net result declined 11% to €4.8 billion in 2019. This was mainly caused by higher risk costs, higher expenses (largely caused by higher KYC expenses and increased regulatory costs) and a higher effective tax rate. This was partly offset by slightly higher income. Net core lending growth in 2019 was €17.2 billion, mainly realised in our retail markets. Net customer deposits grew by €23.4 billion.

9.4%

### ING Group's underlying return on equity[3]

ING Group's underlying ROE was 9.4% compared to 11.2% in 2018. This is slightly below our ambition to generate an underlying ROE between 10 and 12 percent. ING's underlying return on equity is calculated using IFRS-EU shareholders' equity after excluding 'interim profit not included in CET1 capital'.

+71%

### Addition to the loan loss provision

Risk costs increased to €1,120 million in 2019, or 18 bps of average customer lending (which is below ING's through-the-cycle average of ~25 bps). The increase was mainly due to a number of large files in Wholesale Banking as well as higher, but still relatively low, risk costs in Retail Netherlands. Based on the Stage 3 ratio and the total outstandings earmarked as 'at risk', the quality of the loan book improved in 2019.

14.6%

### CET1 ratio ING Group

The CET1 ratio was strong at 14.6%, which is slightly higher than the 14.5% recorded at year-end 2018, and remained well above our CET1 ratio ambition of around 13.5%. Total RWA increased by €12.3 billion, and includes €13.2 billion as part of the expected supervisory impact on RWA which was already taken in the fourth quarter of 2019. The impacts from volume growth, model updates and higher operational RWA were offset by positive risk migration. The available CET1 capital rose by €2.1 billion in 2019.

56.6%

### Underlying cost/income ratio[3]

The underlying cost/income ratio increased to 56.6% from 55.5% in 2018, as 1.2% higher income was more than offset by higher operating expenses. Despite ongoing cost discipline, expenses rose 4.5% due to higher KYC-related expenses, increased staff costs, further increasing regulatory costs and continued investments in business growth. Excluding regulatory costs, the 2019 cost/income ratio was 51.0%.

## Non-financial review

7 Top rankings

out of 14 countries

**Net Promoter Score Retail Banking**
Our customer-centric approach helped us achieve a first-place ranking in seven countries, compared with two or more selected local peers. NPS surveys were held in 14 countries with retail banking activities Ⓐ.

€18.7 bln Climate Finance
€0.7 bln Social Impact Finance

**Responsible finance**
Responsible finance is our way of measuring how we work with our clients to drive progress on climate action and financial health.

€9.3 bln

**Sustainable Investment services**
Sustainable Investment services increased to €9.3 billion, from €6.3 billion in 2018. This underlines our clients' appetite for products and services that integrate sustainability criteria.

25.9 mln

customers felt financially empowered

**Financial empowerment**
Since 2015, we have been measuring our efforts to improve the financial behaviour of our customers and society. In 2019, 25.9 million customers felt financially empowered as a result of interactions with our financial empowerment initiatives Ⓐ.

2.38

**Effective employer human capital ROI**
Human Capital Return on Investment (HCROI) provides an indication of ING's profitability in relation to total employee costs. In 2019 we saw a decrease in HCROI as our total operating and employee-related expenses grew faster than our revenues. In addition to HCROI, we monitor the results of our employee engagement and health surveys.

99.7% Retail Banking NL + Be
99.9% Wholesale Banking

**System availability**
We strive to maintain a high level of system availability of our online payments channels. For 2019, weighted system availability for Retail customers in the Netherlands and Belgium was 99.7%. For Wholesale Banking customers, system availability was 99.9% globally Ⓐ.

# CEO Statement – “The digital customer experience is the key differentiator”

At ING, we delivered solid commercial and financial results in 2019 and took important steps to increase our engagement and leadership role in the area of sustainability and in the fight against climate change. It was also a challenging year in which we needed to focus on enhancing our ability to fight financial economic crime and at the same time pursue our business transformation goals.

2019 was a year of challenges but also one in which we continued to grow and transform ourselves, inspired by our purpose to empower people to stay a step ahead in life and in business.

The ‘people’ part of that purpose is not just customer-focused. It also recognises the important role we play in society. That societal role includes facilitating an efficient economy and the safe and secure financial system it depends on, supporting people to be financially healthy, and fighting climate change. To me, that’s what responsible banking is all about.

## Digitalisation

The fundamental force shaping the financial services sector is digitalisation. It’s not only profoundly influencing customer preferences and expectations, but also the competitive landscape. And developments like digital currencies and blockchain are even driving debates about the very governance of the financial system in the future. As with all disruptive change, it presents both opportunities and threats – one increasingly urgent example is the growing threat of financial economic crime.

At ING, we continued our digital transformation in 2019, with a primary focus on meeting our customers' evolving needs and ensuring we stay relevant to them in the future through a mobile-first approach.

ING's ambition is to be a leader in terms of the digital banking experience, offering retail and wholesale customers everywhere the same empowering and differentiating experience. More than 80 percent of our customer interactions are through mobile devices. Over a third of our customers only interact with us through a mobile device. We are digitalising more processes to fulfil our clear and easy, anytime anywhere customer promise. In 2019, for example, we enhanced the experience of our mobile app users in the Netherlands, Germany, Romania and Spain with Apple Pay, and we introduced instant payments in the Netherlands and Belgium with funds credited to beneficiary accounts within 10 seconds.

Digitalisation is also increasingly an integral part of wholesale banking client service. In the Netherlands and Germany clients can now easily open an account digitally, and we saw growth in the number of clients using our Virtual Cash Management, which allows companies with local accounts to manage their cash position via a single master account.

## Beyond banking

The digital customer experience is now the key differentiator, and our main competitors are no longer just other banks. They are also Big Tech digital leaders like Apple, Google and Tencent who are increasingly moving into financial services. The content, offerings and digital savvy of these go-to platforms cater to a wide range of customers' primary needs with a personal, instant, relevant and seamless experience.

To compete in this new environment, banks have to think beyond banking and develop their own platforms. Financial services aren't a primary need but rather a means to an end; something to help people accomplish their personal and business goals, like buying a place to live, paying for education, or investing to grow their business.

Winners will be those with a superior digital experience, a strong trusted brand, and the ability to leverage a large customer base to attract partners to their platforms. The successful platforms take the effort out of managing finances, offering personalised, real-time advice and a suite of products and services to cover all financial and other relevant needs.

At ING, our platform strategy starts with the ambition to create a uniform and borderless ING experience complemented by beyond banking and third-party offerings that add value for users. And a platform that is ready for open banking that can be a go-to platform offering the best financial services, whether from ING or from competitors. In 2019, we took an important step to create this beyond banking platform when we launched the first protection products in a number of markets as part of our global insurance partnership with AXA.

The open nature of platforms means they have the potential to facilitate the whole customer journey around major life events. In 2019, ING and partners launched real-estate marketplace Scoperty across Germany. This proposition based on high-quality data and machine learning connects buyers and sellers with the aim to offer consumers more transparency and a broader range of offerings by showing 40 million real estate properties in Germany.

## Transforming for the future

To achieve our platform ambition, we're transforming ING. That means creating a uniform and modular technology foundation that helps us share innovations quickly across our businesses and that can be scaled up easily to accommodate growth, as well as open architecture so we can connect to third-party platforms and they with us. We're implementing one set of processes and procedures, and we're pursuing one approach to how we store and analyse data, a key resource for understanding customers and anticipating their needs. And we're uniting in one way of working across ING to increase effectiveness and reduce the time it takes to bring innovations to the customer.

Innovation is core to how we're preparing ING for the future. In addition to cultivating our own internal culture of innovation, we also bring disruptive ideas to market by combining ING's knowledge and network with the knowledge and skills of others.

I'm very proud of the major step in this direction that we took in 2019 with the opening of the Cumulus Park innovation district in Amsterdam Zuidoost, which is also where ING is located. This initiative of ING together with the city of Amsterdam and locally based educational institutions offers businesses, academics and innovators workspaces designed to co-create, learn, research and inspire in a collaborative atmosphere around the themes of urbanisation and digital identity.

And through ING Labs in Amsterdam, Brussels, London and Singapore we're also collaborating with fintechs and others on disruptive innovations in value spaces that best match the expertise and ecosystems in those locations.

## A safe and secure bank

The easy, 24/7 access to financial services that digitalisation makes possible also poses challenges. The number of digital contact moments with customers is rising exponentially – in 2019 they came to four billion for ING alone. This requires banks, which traditionally focus on financial risk management, to sharpen non-financial risk management skills in order to continue to play their crucial role as gatekeepers ensuring that the financial system is better protected from fraud and other criminal activities.

At ING, this took the form of a continued focus in 2019 on our know your customer (KYC) enhancement programme. File enhancement and transaction monitoring look-back activities resulted in improved reporting of suspicious activities to authorities in various countries. Across ING we made progress raising awareness, improving the skills and behaviour of our staff and resolving issues in executing KYC procedures. And we also started implementing structural solutions to build sustainable KYC operations and made promising strides in pilots where we apply artificial intelligence, machine learning and other technologies to increase the efficiency and effectiveness of compliance and anti-money laundering procedures. I am convinced that mastering these skills will be vital for maintaining trust in the digital bank of the future.

At the same time we welcome steps by authorities to achieve wider cooperation between banks, law enforcement and regulators on national and European levels to strengthen the resilience of the whole financial system when it comes to fighting financial economic crime. And we view continued progress on the Banking Union in Europe as important to achieve this cooperation.

Along with the challenge of financial economic crime, increasing digitalisation presents many other challenges as well as opportunities in areas like digital identity, privacy, data exchange, code of conduct on data usage, and storage and protection of data. Many of these issues are addressed in various ways by regulators, governments and industry guidelines, but these are piecemeal measures and they struggle to keep up with the pace of developments. I see an increasing urgency to develop a data framework encompassing all these areas, particularly at the European level. At a time when digiitalisation is dissolving the boundaries between sectors, such a framework would promote innovation by establishing common standards that apply to all parties across industries. We stand ready to play our part in the discussions to develop this framework, which we believe would contribute significantly to a competitive digital environment in Europe.

## Performance

Looking back at 2019, we see a year of solid commercial performance despite the challenging rate environment, geopolitical uncertainties and an increasingly complex and demanding regulatory environment.

ING recorded a full-year 2019 net profit of €4,781 million, an increase of 1.7 percent year-on-year. The underlying net result, which in 2018 is excluding the settlement impact with the Dutch authorities and the net result from Insurance Other, dropped 11.3 percent. Net growth in our core lending book came to €17.2 billion, or 2.9 percent, and net growth in customer deposits was €23.4 billion in 2019. The lending growth was mainly realised in our retail markets, whereas net core lending growth in Wholesale Banking slowed. Underlying income increased 1.2 percent as pricing discipline and business growth, as well as higher net fee and commission income, helped counter the pressure of negative interest rates. We recorded a 4.5 percent rise in underlying expenses for 2019, which included a marked increase in regulatory costs, as well as higher costs related to our KYC enhancement programme. Risk costs increased, but remained below ING's through-the-cycle average. Based on the Stage 3 ratio and the total outstandings as earmarked 'at risk' quality of the loan book improved in 2019. ING's full-year underlying return on equity declined to 9.4 percent, from 11.2 percent in 2018. The CET1 ratio remained strong at 14.6 percent, despite our having already taken part of the expected supervisory impact on risk-weighted assets in the fourth quarter of 2019.

The Board proposes to pay a full-year 2019 cash dividend of €0.69 per ordinary share, subject to shareholder approval at the Annual General Meeting in April 2020. This is in line with our goal of paying a progressive dividend over time, while ING is committed to maintaining a CET1 ratio of around 13.5%, taking into account potential RWA inflation from regulatory developments.

Going forward, ultra-low and negative interest rates, particularly in Europe, are challenging banks to maintain profitability as they try to mitigate the effects of lower rates on margins while balancing this with the interests of customers, particularly retail savings customers. At the same time, the economic stimulus effect is reversing as people save more to counter the impact of low rates on their savings and retirement goals. This makes it clear that new thinking is required from policymakers overseeing interest rate, spending and tax policies in order to keep the economy and financial sector on a sustainable footing.

FY2019 ING Group net profit

**€4,781**
million

FY2019 underlying return on equity

**9.4 %**

FY2019 net core lending

**+€17.2**
billion

FY2019 net customer deposits

**+€23.4**
billion

## Financing a sustainable future

The issue of climate change acquired increased urgency in 2019. At ING we strongly believe that through our decisions in conjunction with customers about what we will or won't finance, banks can play a role in influencing the direction and pace of society's transition to a more sustainable, low-carbon economy.

It was therefore important for me on behalf of ING – as a founding signatory – to join more than 130 other banks from around the world in commiting to the Principles for Responsible Banking at the UN Climate Action Summit in New York. The principles encourage banks to align their strategies and operations with the goals of the Paris Climate Agreement and the UN Sustainable Development Goals (SDGs). And ING was recognised for its leadership role through the adoption of its climate ambition as the core of the Collective Commitment to Climate Action, which was signed by over 30 banks. Signatories agree to take concrete actions within a year to achieve these goals, to be publicly held accountable for our progress and to work together to share insights and tools.

ING took an important step on this journey last year when we announced our Terra approach to steer the impact of our more than €600 billion lending portfolio in support of the Paris Climate Agreement's goal to limit the rise of global temperatures to well below two degrees Celsius, with the ambition to strive for 1.5 degrees. In 2019 we published the first progress report on Terra. It details the sectors where we're on track with the well under two-degree scenario, those where we're not on track but are outperforming the market, and those where we're both below the market and not meeting the target. With this first report we're living up to our promise to transparently deliver results on measuring climate alignment and steering our portfolio, and we became the first international bank to publish any type of climate alignment disclosure. We continue to proactively share the Terra approach and to work with peers and sectors to develop sound methodology for climate alignment reporting.

And through ING Wholesale Banking, we are one of the pioneers in sustainable finance. In 2019 we continued to grow our expertise and contribute to the development of this sector by introducing new sustainability improvement concepts and financial products, including the first sustainability-linked Schuldschein for machinery and plant manufacturer Dürr.

## Measuring success

There are many ways to measure a company's performance, but I believe the most important way is to look at yourself through the eyes of your customers. It's their satisfaction and loyalty that ultimately form the basis for your long-term success. I'm pleased that customers continued to turn to us in 2019 for their financial needs, as shown by the growth of our total number of customers by 2 percent to 38.8 million. And customers chose to deepen their relationship with us. The total number of primary retail relationships – customers who have current accounts with recurrent income and at least one other product – increased by more than 830,000 to 13.3 million, putting us on track to reach our goal of 16.5 million primary relationships by 2022.

At the same time, our responsibility clearly goes beyond the strict confines of our business and extends to the special role we and other banks can play in the wider society, whether that be in the environmental and social area or in preventing financial economic crime.

The successes we achieved in 2019 and the steps we took to prepare for the future would not have been possible without the dedication and tireless efforts of our employees. We are also grateful for the continuing loyalty of our shareholders and the engagement of many stakeholders, whether that be in collaboration with us or in challenging us to be the best we can be. To all of them, I and my colleagues on the Executive Board and Management Board Banking wish to extend our sincere thanks.

As announced in February, I will leave ING after a career of 29 years, the last seven of which as ING's CEO. I'm proud of this company and its people and what we've achieved together during my tenure as CEO. ING is supported by a strong brand and guided by a clear purpose that it puts into practice every day. This positions it well to be successful in a digital world. I have no doubt that ING's committed people and management will continue to build on these strong foundations in the future.

Ralph Hamers

**Ralph Hamers**
CEO ING Group

# The world around us

Our business is shaped by social and economic factors. These include the ever-evolving expectations of our customers and industry stakeholders, digital technologies, market conditions and new regulations. To deliver long-term value to our stakeholders and society, ING not only responds to these, but also aims to be a catalyst for change.

To stay ahead, we engage with our internal and external stakeholders in various ways, and respond to their feedback. We also constantly monitor external shifts via regulatory developments and the analysis of market trends. This gives us insight into the most important topics for our stakeholders and how these relate to our actions and decisions.

Our annual materiality assessment – quantitative research on the importance of specific topics among different stakeholder groups – helps us identify which economic, environmental and social topics we should focus on. The results of the 2019 materiality analysis that underpin our strategic business decisions are highlighted in this report.

This chapter will address the most important themes we identified in this year's materiality assessment: the economy, the regulatory environment, innovation and transformation, data and IT, governance and culture, integrity, and climate change. The infographic on this page provides an overview of each topic. With the exception of financial performance, the material topics cited here are subject to limited assurance. See the 'Independent auditor's assurance report'.

| Trending themes | Material topics |
|---|---|
| The economy and regulatory environment | ▪ Financial performance |
| Innovation and transformation | ▪ Innovation<br>▪ Digitalisation and interconnectivity<br>▪ Usability and accessibility of our products |
| Data and IT | ▪ IT systems and platforms<br>▪ Customer privacy and Information security<br>▪ Cyber resilience (includes cyber-attacks and data theft / fraud) |
| Governance and culture | ▪ Culture, ethics and integrity |
| Societal challenges | ▪ Climate change |

# Global economic developments

Being a global financial services company, ING's revenues and earnings are affected by the volatility and strength of the economic, business, liquidity, funding and capital markets environments specific to the geographic regions in which we do business. This includes operations in both advanced economies, as well as emerging economies.

Against a backdrop of continuing US-China trade tensions, prolonged uncertainty on Brexit and reduced US fiscal stimulus, global economic growth weakened throughout 2019. The global economic growth rate fell to its lowest level in a decade.

In addition, the first months of 2020 were marked by the spread of corona (COVID-19) virus-linked infections in and beyond China, negatively affecting Chinese manufacturing and trade, and posing the threat of significant disruption to global supply chains, global manufacturing, travel and tourism, investment and consumer spending.

## Advanced economies

Global economic growth slowed in 2019, with a decline in trade and industrial output as well as a weakening in the services sector. In the US, economic momentum slowed as the positive effects of 2018's fiscal stimulus ebbed away and confidence slipped against the background of increased trade tariffs. Economic growth in Netherlands, Belgium and Luxembourg remained strong despite the weak global trade environment and remains above the eurozone average. In Germany, economic growth came to a near standstill during the year due to several factors combined with weak external demand. In Italy, economic growth was minimal as an uncertain fiscal outlook took its toll on domestic demand. Consistent with slowing economic growth, inflation slowed or remained low in major advanced economies.

Deteriorating economic sentiment and expectations about monetary policy easing drove bond yields down in most advanced economies. Yields on 10-year US government bonds fell to the lowest level since July 2016, and the yield on 10-year German government bonds reached a record low of -0.73 percent in August. As a result, sovereign yield curves were partially inverted in most advanced economies.

Both the level of interest rates and the difference between short and long-term rates (the 'slope' of the yield curve) impact our net interest income. Given our geographical footprint, eurozone rate developments are more important for us than US ones.

Prospects for weaker economic growth and lower inflation induced both the US Federal Reserve and the ECB to loosen monetary policy.

The historically low, and even negative, interest rates in the eurozone make it challenging for banks to maintain positive income in the form of a margin between traditional saving and lending activities.

## Emerging economies

Central banks in some of the main emerging market economies eased policy to pre-empt a further deterioration of economic circumstances. Brazil, India, Korea and Mexico, among others, lowered their policy rate.

Economic growth in Asia was negatively impacted by the imposition of import tariffs and related uncertainty about global trade. In China, already in the midst of a structural slowdown, economic growth slowed to its lowest rate in 29 years. To address this adverse external environment, both fiscal and monetary stimuli were introduced.

Poland continued to be resilient to slowing growth in the eurozone and the economic slowdown in Turkey found a floor. Falling inflation and a return of investor confidence in Turkey contributed to a general decline in interest rates.

### How exchange rates responded

Exchange rate fluctuations have an influence on the business of a globally operating bank like ING, including in the areas of profitability and funding. Several factors in the course of the year contributed to the exchange rate of the euro weakening against the dollar. These included yields in the euro area persistently being below those of the US, uncertainty around the possibility of a broadening of the US trade dispute from China to Europe, and the negative fall-out on economic activity of a possible no-deal Brexit.

During the year, the British pound's performance against the euro was erratic, mostly driven by changing market expectations about the possibility of the UK leaving the EU with or without a withdrawal agreement.

### Brexit factor

Brexit continued to dominate 2019, with the UK finally leaving the EU on 31 January 2020. Milestones in the year included British Prime Minister Theresa May making way for Boris Johnson, several extensions to withdrawal dates, and a snap general election, which the Conservatives won by a landslide in December.

In 2019, the financial sector, regulators and banks alike put tremendous effort into preparing for all Brexit scenarios, with the aim of ensuring the resilience of the banking sector even in the face of a no-deal scenario. For banks, the implementation of their contingency planning was a key priority. On the legislative side, EU and UK regulators took the necessary steps ensuring operational continuity.

ING took several steps to prepare for Brexit, making various adaptations to ensure a smooth transition. Following Brexit, the European Central Bank (ECB) was set to classify the UK as a non-EU or third country. As a consequence, ING has made the decision to move a number of EU-related trading operations to a location within the EU. Brussels was chosen due to its existing infrastructure.

The proposed changes by no means dilute the importance of the UK as one of ING's major Wholesale Banking hubs. The UK centres of expertise, including Financial Markets, support ING's clients and its teams in other countries and regions across the globe. The UK team will continue to be an important pillar for ING.

## A data-driven world

Over the years, ING has been working to meet the needs of our customers by transforming to a global, digital organisation. This process is strongly driven by data. It's at the heart of everything we do: getting to know our customers, giving them the tailored services they need, and ensuring their experience is personal, instant, relevant and seamless.

We take our responsibility seriously to safeguard our customers against loss or misuse of data. This is not only our duty of care towards customers, but a wider social responsibility to act as gatekeepers to the financial system, keeping it safe, secure and protected against fraudulent and criminal activities.

Along with financial economic crime (FEC), digitalisation presents challenges in areas like digital identity, privacy, data exchange, code of conduct on data usage, and storage and protection of data. While many of these are addressed in various ways by regulators, governments and industry guidelines, these measures don't always keep up with developments.  At ING, we see an increasing urgency to develop a data framework encompassing all these areas, particularly at European level. This would promote innovation by establishing common standards across industries.

Protecting our IT infrastructure and systems and personally identifiable information from cyberattacks will remain an extremely important factor for the banking sector and for ING. Breaches can lead to serious legal, reputational and financial damage. Digital innovation and the further development of our data-driven business models (e.g. open platforms), along with more stringent regulations on data privacy, pose compliance and cybersecurity risks.

## Cybersecurity

Cybercrime is a growing threat to companies in general and to the financial system specifically. Cyberattacks are becoming more frequent, and more intense. At the same time, banks are becoming more exposed as they digitalise, rely more on cloud computing, and are increasingly connected to third-party providers.

Cybersecurity is a key concern for ING. Our objective is to anticipate cybercrime-related activities and prevent threats from becoming a reality. ING takes a multi-faceted approach to cyber security. Our digital-first approach means that the safeguards deployed around assets change in line with the evolving threat landscape. Safeguards include security and communication monitoring capabilities that use behavioural analysis, machine learning and rules engines. ING is also partnering with fintech companies to build a framework that supports security innovation within the bank.

Read more in the 'Innovation and transformation' chapter.

## Personal data protection

The regulatory framework for personal data is fundamentally shaped by the EU. It seeks to walk the fine line between privacy protection and fostering data sharing.

Two crucial pieces of the new personal data architecture were rolled out across the EU in 2018 – the second Payment Services Directive (PSD2) and the General Data Protection Regulation (GDPR).

The GDPR is a landmark personal data protection framework that is arguably the world's most stringent. It gives customers the right to receive their personal data on request and for their data to be directly transmitted to third parties. ING has been subject to the data protection requirements set out in the EU's General Data Protection Regulation 2016/679 (GDPR). We have updated our Global Data Protection Policy (GDPP) accordingly and are implementing revised and new requirements in each country. To know more about what personal data ING collects, what we do with it and who we share it with, go to our Privacy Statement on ing.com or any local ING website.

PSD2 opens banking and allows customers to authorise their bank to share their account information with licensed third parties. For example, customers can view their accounts at other banks in ING's mobile banking app; or authorise ING to access their account information at other banks when applying for a loan, which can help speed up the approval process. The payment initiation services element of PSD2 allows a third party to initiate a payment on a user's behalf or from their account. As of September 2019, ING's entities based in Europe comply with PSD2. Further guidance is yet to follow on the role of banks in providing services around anti-money laundering (AML).

# Digital transformation

Digital banking, innovation and transformation are key to our business. Being digital guides our investments and transformation efforts; all our initiatives are geared towards creating one efficient and safe ING worldwide.

The world is becoming increasingly digital and technology-driven – banking is no different. Digitalisation in banking, driven by benchmark customer-friendly digital experiences offered by Big Tech platforms, is improving how customers manage their money, offering increased convenience, financial insights and empowerment.

ING's ambition is to be a leader in terms of the digital banking experience, offering a single digital platform or 'ecosystem' where customers can find solutions to all of their financial and finance-related needs. This platform will provide a customer experience that is personal, instant, relevant and seamless across borders.

As digitalisation continues to increase, we are connecting more and more platforms via application programming interfaces (APIs). We believe the financial services industry will converge to an open structure in which APIs are the de facto standard for integrating with partners.

As we innovate to become the digital bank of the future, we must move fast. Digitalising our products and services is necessary as people expect their financial services company to use the latest technology. We made good progress in 2019. We introduced innovations that improve the digital customer experience and strengthen our mobile-first approach.

In Germany and Poland, we now offer features that help customers to better manage their money by notifying them of upcoming payments, similar to the 'Kijk Vooruit' feature we offer in the Netherlands. We've also enhanced the experience of our mobile app users by adding Apple Pay in the Netherlands, Germany, Romania and Spain, after introducing it earlier in Australia and Poland.

In Wholesale Banking, clients in Poland can now also sign credit documentation electronically, and in Belgium we enable our customers to start the mortgage process online. Our partnerships with fintechs also help ING offer more financial tools to customers.

Read more about this in the 'Innovation and transformation' and 'Our business' chapters

## A culture of trust

Trust in the banking sector sharply eroded after the 2007-2009 crisis and has not fully recovered. A key part of restoring trust in the banking system is acting with integrity and in a fair, transparent and prudent way in all operational and business conduct.

We need to adhere to a complex set of policies and rules relating to business conduct issues, including insider trading, anti-trust, price fixing, and market manipulation. Commercial banks like ING are in scope of regulations to help detect and prevent tax evasion, fraud, money laundering, and corrupt practices. In addition, various regulators are increasingly scrutinising the cultures and behaviour of banks.

Banks that are able to ensure regulatory compliance through robust internal controls will be better positioned to build trust with clients and shareholders. Ensuring regulatory compliance to counter financial economic crime is a key priority for ING. However, merely having policies in place is not enough.

Having a strong compliance culture and promoting integrity-led behaviour are key to reducing potential risks. ING's Orange Code provides guidance, and living up to the Orange Code is a substantial part of performance management within ING.

In addition, ING introduced the Orange Code dilemma model in 2017 to support well-balanced and integrity-led decision-making. In 2019, the model was incorporated into existing decision-making processes and experts were trained globally to support the organisation in applying the model.

Other initiatives such as compliance risk culture monitoring, global data ethics and the 'i for integrity' programme with the Netherlands and Belgium are continuing. Also, a behavioural risk team set up within ING in 2018 continued to perform additional behavioural risk assessments, develop interventions to support management and enhance behavioural risk management within ING. ING has also been working on a global code of conduct, which was introduced in the first quarter of 2020.

ING continues to have a whistleblower channel in place. Also open to third parties, it allows for the anonymous reporting of concerns, including those related to breaches of national and international business-conduct regulations, as well as our own policies and procedures. Our Whistleblower Policy protects informants from retaliation.

Read more about our Whistleblower Policy in the 'Developments in risk and capital management' chapter.

Our shared ING values and commitments to integrity should always and everywhere guide us in how we empower our customers and how we live up to our responsibilities to stakeholders. In 2018, ING's past actions resulted in a loss of trust from stakeholders. We have continued to work hard in 2019 to learn from these, rebuild trust and improve for the future.

## KYC and anti-money laundering

We take our role as a gatekeeper to the financial system seriously, and are taking important steps to boost our ability to keep the bank safe from criminal activities and protect our customers, the bank and society.

Financial economic crimes such as money laundering and tax evasion are not contained within a single country or jurisdiction, but are a global challenge that impact the entire financial system. A recent study by Brigitte Unger, University of Utrecht, found that in the Netherlands alone, almost €13 billion worth of criminal money is laundered each year. At the same time, technology is advancing and criminals are becoming more sophisticated, which increases the risk that the growing number of digital card and payment transactions are used for fraud or money laundering purposes.

In 2019, we continued to focus on our global know your customer (KYC) enhancement programme. We now have around 4,000 FTEs working in KYC-related activities. File enhancement and transaction monitoring look-back activities resulted in improved reporting of suspicious activities to authorities in various countries. We're also working on promising tools that use machine learning and artificial intelligence to increase the effectiveness of our KYC operations.

We made progress raising awareness and improving the skills and behaviour of our staff and our governance of KYC across ING. The programme will deliver the basis for ING's KYC operations. Further improvements, from continuous learning and quality-assurance cycles, will continue to be embedded.

ING welcomes steps by the Dutch and other authorities to achieve wider cooperation between banks, law enforcement and regulators on both a national and European level to strengthen the financial system's resilience in the fight against financial economic crime.

We are working with the Dutch Banking Association (NVB) and the Dutch Central Bank (DNB) on harmonising efforts to counter financial economic crime and participate actively in various working groups and project teams in this area. To help in the fight against money-laundering, ING joined several other Dutch banks in 2019 to explore the possibilities of setting up a joint organisation to monitor payment transactions: Transactie Monitoring Nederland ('transaction monitoring Netherlands').

In 2019, the European Commission conducted an investigation into anti-money laundering (AML) infringements by EU Financial Institutions. In July, it published three reports setting out the lessons learned from this exercise. The EU confirmed that financial institutions fell short in their compliance with requirements from AML legislation on a number of occasions. It also noted structural shortcomings in the control frameworks put in place by financial institutions, particularly for transaction monitoring and suspicious transactions reporting, in sectors with high volumes of transactions.

AML supervisory practices, both in terms of expectations and sanctions, differ across member states and the cross-border cooperation between authorities could be improved. In its reports, the European Commission envisages setting up central supervision and harmonising standards for and formats to be used by authorities.

The European Commission also finds that national implementations and interpretations of EU AML directives are not aligned and require improvement, possibly through a regulation instead of a directive. The European Commission is considering legislative proposals, which are expected before the summer of 2020.

[For more on KYC and GDPR, read the ‘Developments in risk and capital management’, ‘Our people’ and ‘Innovation and transformation’ chapters.]

## Commitment to human rights

ING strives to respect people’s rights in accordance with the Universal Declaration of Human Rights. We apply these and other principles, such as those of the UN Global Compact, UN Guiding Principles for Business and Human Rights, the International Labour Organisation, and OECD Guidelines for Multinational Enterprises throughout our operations. This includes the right to collective bargaining and freedom of association.

We base our own human rights policy on these conventions. We seek to judge employees on their merit and skills and without discrimination according to  race, age, sex, religion, ability or belief. We believe that by respecting human rights and increasing our efforts in diversity, we are strengthening our workforce and our business. Read more in our Human Rights Update 2019.

## Climate change

There is an increased urgency around climate change – it’s now viewed to be at crisis stage and is topping global agendas. The International Monetary Fund (IMF) is examining the impact of climate on the world’s financial markets and whether it is priced into market valuations. The financial cost of climate change was the subject of many discussions at the IMF at its meetings in 2019. Climate-related risk also tops the World Economic Forum’s (WEF) 2019 global risk ranking in terms of likelihood and impact. The environmental risk category is becoming more prominent.

Read more in the ‘Developments in risk and capital management’ chapter.

We are continuing to advance our understanding and approach to climate risks and opportunities. We support clients and transactions with a positive climate and social impact, and steering our entire loan book to meeting the Paris Climate Agreement’s well-below two-degrees Celsius goal.

We call our strategy to get there the Terra approach. In September 2019, we published the first progress report on Terra. The report presents ING's pathway towards climate alignment in the sectors most responsible for climate change and is intended to be published every year.

We believe climate risk is a strategic and credit risk. We've set out targets to 'green' our portfolio by reducing our financing to coal-power generation to close to zero by 2025. By the end of 2025, we will no longer finance new or existing clients in the utilities sector that are over five percent reliant on coal. We continue to support these clients' non-coal energy projects. For details on our coal-related exposure, please refer to the Non-financial appendix.

Read more in the 'Developments in risk and capital management' chapter.

We've developed a comprehensive suite of sustainability products and services for our Wholesale Banking clients across all sectors to help them transition to the low-carbon economy of the future.

In lending, we pioneered the sustainability improvement loans approach back in 2017. We introduced another innovative product in 2019 – a sustainability improvement derivative. We're also making progress in our circular economy programme with an increase in the number of circular deals in 2019. Added to this, we launched a sustainability improvement capital call facility for Singapore-based Quadria Capital Management, the first in the world to link the interest rate of a private equity fund to the sustainability performance of its portfolios.

True to our partnership approach, ING teamed up with the European Investment Bank (EIB) in 2019 to make €400 million available for large business customers in the Netherlands, Belgium and Luxembourg to invest in sustainable projects. Companies selected for their sustainable impact will benefit from an interest rate discount of 0.3 percent because of the EIB's backing.

Read more in the 'Our business' chapter.

No one sector, much less one bank, has the ability to solve the world's problems. That's why we seek to increase our impact through partnerships and coalition-building. For our Terra climate approach, we worked with the 2° Investing Initiative (2°ii) to develop an open-source methodology to measure our loan book and steer it towards the climate goals of the Paris Agreement. We then personally and individually engaged with more than 40 banks interested in the work ING was doing. This led to 17 banks joining the pilot with 2°ii. Four of these banks joined us in our overarching commitment to steer our loan book with what we called the Katowice Commitment in December 2018.

In September 2019, we were a founding signatory of the UN-backed Principles for Responsible Banking, adopted by more than 130 banks representing a third of the world's banking assets. The next day, ING and more than 30 of these banks pledged to turn these principles into action by signing the Collective Commitment to Climate Action, which was created using our Katowice Commitment as a foundation.

For more information, please refer to the 'UNEP FI Principles for Responsible Banking' section of the 'Non-financial appendix' at the back of this report.

# Our strategy and how we create value

ING's Think Forward strategy continued to guide us during 2019. It was a year of rapid transformation in the competitive landscape, regulation, customer preferences and the economic context. It was marked as well by the growing threat of climate change. These developments present both challenges and opportunities.

There were numerous developments in 2019 with important implications for financial services providers and their future strategic direction. Digitalisation increased, with a growing percentage of customers doing their banking with mobile devices. Big Tech platforms continued to leverage their expertise in the digital customer experience to encroach on banks' market share by targeting lucrative parts of their traditional value chains, such as payments.

Competition was further spurred by implementation in 2019 of the EU's PSD2 directive opening the payments market to non-bank competitors. Persistently low interest rates in Europe edged still lower, pressuring banks' interest income and profits. And the growing threat of climate change intensified the debate about the role business can and should play to promote a sustainable future.

## Think Forward

Our Think Forward strategy – with its purpose to empower people to stay a step ahead in life and in business – continued to guide our strategic response to the challenges and opportunities these developments present. Chief among these is how banks can master the digital customer experience and tap into its opportunities.

The strategic priorities that are the focus of the Think Forward strategy aim to create a differentiating customer experience. They do that by deepening the relationship with the customer, by providing us with tools to know our customers better and to anticipate their evolving needs, and by fostering an innovation culture that will ensure we are able to continuously adapt our offerings and business model to anticipate and meet those needs in future. And the Customer Promise – clear and easy, anytime anywhere, empower, and keep getting better – forms the basis of the customer experience we aim for.

In concrete terms, this translates into a focus on primary relationships. These are relationships where we serve multiple banking or other needs of retail customers and wholesale banking clients and which allow us to know these customers and their needs better so we can add value for them and grow the relationship. To do this, we aim to master data management and analytics skills, including artificial intelligence. To provide for future needs, we promote a culture of innovation within ING and partner with fintechs and other innovative partners to develop interesting propositions, both in financial services and beyond banking that can add value for our customers and others.

## Platform approach

The competitive landscape that banks face is increasingly being shaped by Big Tech companies. They offer customers a superior digital experience through an open platform approach that delivers a range of their primary needs in a go-to digital ecosystem. This ability to provide for primary needs, with both proprietary and third-party offerings that are easily accessed through mobile devices, defines their success. Banking, by contrast, is a facilitator and not a primary need. The choice for banks is to challenge their existing business models, to disrupt themselves, or risk being disintermediated and relegated to a status of white label facilitators of others' platforms.

ING chooses to pursue its own platform approach. It aims to create a go-to financial services platform offering one customer experience wherever we operate and one that's mobile-first in keeping with ING's clear and easy, anytime anywhere Customer Promise. To support this ambition, we're evolving to a single global modular technological foundation that can be easily scaled up to accommodate growth, and one that's open so it's ready to connect to other platforms and offers users relevant third-party products and services.

## Innovation and transformation

To pursue this aim, we are converging businesses with similar customer propositions. The Unite be+nl initiative is combining the Netherlands and Belgium. The Maggie (formerly Model Bank) transformation programme is standardising our approach in four European markets - Czech Republic, France, Italy and Spain - similar to our successful digital approach in Germany based on a standardised omnichannel customer experience across mobile devices and web. We pursue a plug-and-play approach to product development to ensure we can share innovations quickly across our businesses. Examples of this in practice include the One App now active in Belgium, Germany and the Netherlands, offering one mobile customer experience in those markets. And we're evolving toward a uniform approach to data and its management, to processes and to one way of working to support this transformation and accelerate innovation.

Increasing the pace of innovation is a strategic priority and core to ensuring we remain relevant to our customers and can live up to our purpose to empower people to stay a step ahead in life and in business. And it is a prerequisite for realising our platform ambitions. We do this by fostering an internal culture of innovation through customised methodologies and by providing resources to our business through the ING Innovation Fund. And we collaborate with a wide range of fintechs and other external parties to accelerate the development of innovative solutions for customers.

To spur this collaboration, ING in 2019 opened the Cumulus Park innovation district in Amsterdam Zuidoost, an initiative together with local government and educational institutions offering businesses, academics and innovators workspaces designed to co-create, learn, research and inspire in a collaborative atmosphere around the themes of urbanisation and digital identity.

And through ING Labs in Amsterdam, Brussels, London and Singapore we're also collaborating with fintechs and others on disruptive innovations in value spaces that best match the expertise and ecosystems in those locations.

Examples of collaborative innovations include beyond banking initiatives for retail customers. In 2019 we launched the first protection products as part of the global insurance partnership with AXA, distributed primarily through our mobile app. Examples in Wholesale Banking include Cobase, a platform that enables companies to manage accounts at multiple banks through one interface, and blockchain solutions in areas like trade finance that drastically reduce the time and complexity of trades.

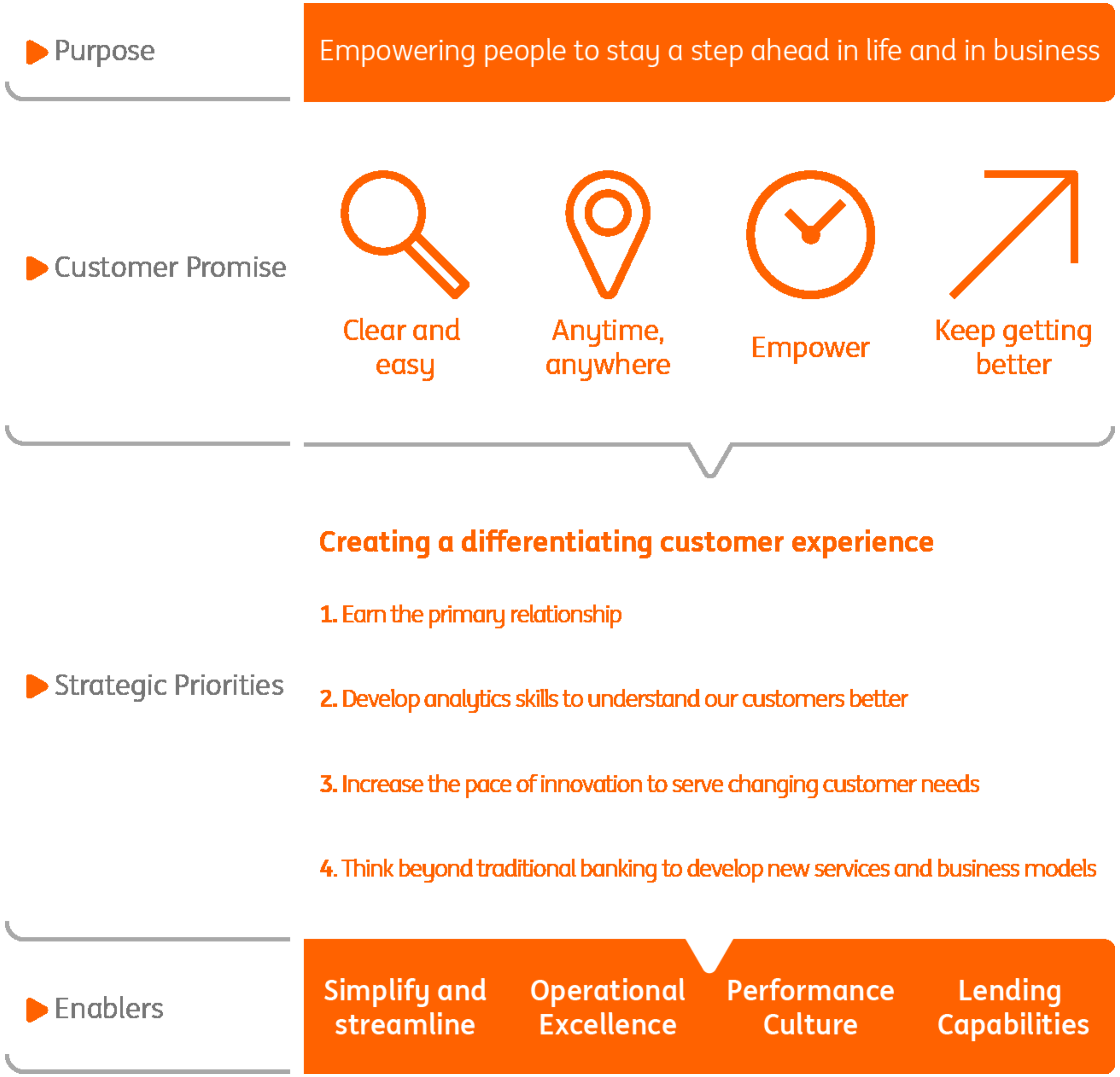
In 2019, resources were devoted to improving our capabilities in the areas of know your customer and fighting financial economic crime, causing some reprioritisation related to the pace of implementation of innovation and transformation goals. However, our strategy and priorities in these areas remains unchanged.

## Promoting a sustainable society

ING's empowerment purpose is not limited to our own customers. In striving to help people to stay a step ahead in life and in business, we see a key role for ING in promoting a sustainable society, as well as important opportunities both for us and our customers.

To promote people's financial health, we focus on giving them the knowledge and tools to make informed decisions, and we support initiatives that are developing awareness about the drivers behind how people arrive at financial decisions so better methods and tools can be developed in the future. And through our financing we seek to positively influence society's transition to a more sustainable, low-carbon economy. One of the important ways we do that is through our Terra

## Our strategy on a page




approach to steer the impact of our lending portfolio to support the Paris Climate Agreement's goal to limit the rise of global temperatures to well below two degrees Celsius.

## Elements of our strategy

Our Think Forward strategy was launched in 2014 and guides everything we do. It was visionary then and today is ever more relevant to our success. This section describes the strategy and includes references to examples and additional information on how our strategy links to the material topics identified by our stakeholders.

### Strategic priorities

To deliver on our Customer Promise and create a differentiating customer experience, we have identified four strategic priorities:

#### 1. Earn the primary relationship

Earning the primary relationship is a strategic priority for ING as it leads to deeper relationships, greater customer satisfaction and, ultimately, customers choosing us for more of their financial needs. In Retail Banking we define primary customers as those with multiple active ING products, at least one of which is a current account where they deposit a regular income such as a salary. For Wholesale Banking these are active clients with lending and daily banking products and at least one extra product generating recurring revenues over the last 12 months.

Read more in the 'Our business' chapter.

**Material topics:** financial performance, usability and accessibility of our products.

#### 2. Develop data analytics

With the further digitalisation of banking, data is an important asset that helps us improve the customer experience and earn the strategically important primary relationship. We rely on data to understand what customers want and need. We use these insights to personalise our interactions with customers and empower them to make their own financial decisions. Data skills are also essential to know our customers from a regulatory and risk perspective, to prevent fraud, improve operational processes and generate services that go beyond traditional banking. At ING, we recognise that excelling at data management is a core competency if we are to realise our ambition to create a personal digital experience for customers. We are on course to implement one global approach to data management to ensure we maximise the potential of this key resource. Discussions in society about data privacy and the tightening of data privacy legislation and regulations, as embodied in the EU's General Data Protection Regulation (GDPR), are raising awareness of this important issue. At ING, we are committed to handling customer data safely and being open about how we use it.

Read more in the 'The world around us', 'Innovation and transformation' and 'Our business' chapters.

**Material topics:** customer privacy, business ethics and culture, digitalisation and interconnectivity, cyberresilience.

### 3. Increase the pace of innovation to serve changing customer needs

Evolving customer expectations, new technologies and new competitors are transforming banking. Innovation is at the heart of the Think Forward strategy and essential to develop the beyond banking and disruptive products, services and experiences that support our platform ambitions. We promote innovation internally through ING's own PACE innovation methodology and by earmarking funds to support businesses with innovative initiatives. To speed up the pace of innovation, we also partner with outside parties, including fintechs.

Read more in the 'Innovation and transformation' chapter.

**Material topics:** innovation, usability and accessibility of our products, digitalisation and interconnectivity

### 4. Think beyond traditional banking to develop new services and business models

Persistent low interest rates and disruption from the rise of new non-bank entrants in the financial services sector are challenging banks' traditional business models. Thinking beyond traditional banking is crucial if we are to find new ways to be relevant to our customers. Here, open banking offers opportunities. By partnering with others or developing our own digital platforms, we can offer customers new and complementary services that go beyond banking – and create new revenue streams for ING.

Read more in the 'Innovation and transformation' and 'Our business' chapters.

**Material topics:** innovation, digitalisation and interconnectivity, customer privacy, business ethics and culture.

## Enablers

Four strategic enablers support the implementation of our strategy: simplifying and streamlining our organisation, operational excellence, enhancing our performance culture and diversifying our lending capabilities.

### 1. Simplify and streamline

Simplify and streamline refers to ING's aim to become a more effective, cost-efficient and agile organisation with the flexibility to respond to fast-changing customer needs and low-cost competitors. To support our ambition to evolve into one, scalable, mobile-first digital platform that offers a uniform and superior customer experience we are building a global foundation with the same approach to data, IT infrastructure, and processes. This will feature simplified and standardised products and systems and by modular architecture, integrated and scalable IT systems and shared services. We also apply one Way of Working (WoW), based on agile principles, across many areas of ING to speed up the pace of innovation and bring new customer solutions to market faster, as well as to enable global collaboration and knowledge sharing.

Read more in the 'Innovation and transformation' and 'Our business' chapters.

**Material topics:** usability and accessibility of our products.

## 2. Operational excellence

Operational excellence requires continuous focus. We need to ensure that ING's operations provide a seamless and flawless customer experience and that our operations remain safe and secure so we can play our important role as gatekeepers to the financial system. We invest to provide stable IT systems and platforms so we are there for our customers when they need us and to provide them with the highest standards of data security. As part of our know your customer (KYC) enhancement programme we are developing a global approach to how we deal with customer due diligence and transaction monitoring, supported by standardised tools, a uniform approach to data and clear governance.

Read more in the 'Innovation and transformation' and 'Risk' chapters.

**Material topics:** IT systems and platforms, cyberresilience.

## 3. Performance culture

We believe there are strong links between employee engagement, customer engagement and business performance. We aim to continually improve our performance culture by creating a differentiating employee experience and enhancing the capabilities of our leaders.  By focusing on delivering a great employee experience and by stepping up our leadership capabilities we develop our employees' engagement and ability to deliver on our purpose and strategy.

ING's Think Forward Leadership Programme (TFLP) aims to develop greater leaders and better managers who can engage staff and enhance team performance. Introduced for senior leaders in 2017, it was extended later that year to people managers globally as the TFL Experience (TFLE), a four-day programme with follow-up learning activities. The first phase of the programmes focused on the Orange Code, individual purpose and the Think Forward strategy. Phase 2, launched for TFLP in 2018, focused on high sustainable performance, talent management and performance transparency. It will be extended to the TFLE in 2020.

We expect every ING employee to ensure we are a bank people can trust and that we can be proud of. This starts at the top as leaders should create the right conditions for our employees to safeguard the bank and society from financial economic crime. In 2019, we developed a new global e-learning module that will be rolled out in early 2020 to all employees to enhance their KYC awareness. And a global code of conduct was rolled out in the first quarter of 2020 that builds on the Orange Code and gives employees worldwide concrete examples of how to put the ING values into practice.

We promote a more diverse and inclusive workforce by aiming for 'mixed teams'. We have adopted the 70 percent principle, which gives managers a basis for building mixed teams around appropriate dimensions of diversity (with a focus on gender, nationality and age group) and strives for a minimum 30 percent difference in team make-up. In 2019, we worked to further this aim by deep-diving into diversity dimensions ING-wide and setting up dashboards to help different areas of the business monitor their progress. Like many other financial organisations, getting the right mix of people remains a challenge in parts of the business and there is more to be done to redress imbalances that still exist.

Read more in the 'Our people' chapter.

**Material topics:** business ethics and culture.

### 4. Lending capabilities

Broadening and diversifying our lending capabilities to continue to grow client franchises is our fourth strategic enabler. To do so, we are seeking opportunities in Retail, SME and Consumer Lending segments, as well as focusing on Wholesale Banking lending growth in our businesses in Challengers & Growth (C&G) Markets and in our sector lending franchises. ING is also considered one of the pioneers in sustainable finance, having introduced the first sustainability ESG-linked loan and a made-to-measure sustainability improvement loan. In 2019, ING continued to shape this sector and open up new markets by developing sustainability improvement concepts and financial products. In 2019, we continued to grow at resilient interest margins, with net core lending growth of €17.2 billion, or 2.9 percent, mainly realised in our Retail markets. Our ambition is to continue to grow profitably within our risk appetite, but given market dynamics we expect growth at Wholesale Banking to be slightly lower than in Retail Banking.

Read more in the 'Our Business' chapter.

**Material topics:** financial performance, climate change.

# Value Creation Model

## Input

### Financial resources

Our customers entrusted us with €744 billion of capital in subordinated loans, debt securities issued and customer deposits (including) from banks).

### Network & connections

To offer simple and streamlined products and services, an advanced and reliable IT platform with high system availability is key.

### Knowledge & expertise

We innovate to think beyond banking and keep satisfying customers' changing needs.

To counter financial economic crime, we are using technology and our innovation skills to make improvements

### People

Our 56,000+ employees put our customers first and are evolving to keep pace with the skills and capabilities needed to embrace a digital future.

## What we do

Purpose

Empower people to stay a step ahead in life and in business


Promise

We make banking clear and easy, available anytime and anywhere and we keep getting better

## Outcome

### Financial resources

We grew our net core lending by €17.2 billion and our net customer deposits by €23.4 billion. ING posted a net result of €4.8 billion over FY2019.

ING paid out €2.6 billion in dividends to shareholders and €3.0 billion in interest to bondholders.

### Network & connections

We are creating financial and finance-related solutions for customers through their preferred platforms, or by becoming a platform ourselves. The number of primary relationships has increased with 6.7 percent to 13.3 million

The availability of our online channels was 99.9 percent for wholesale clients globally, and 99.7 percent for retail customers in the Netherlands and Belgium.

### Knowledge & expertise

We have 200 fintech partnerships helping us to boost innovation. With the Think Forward Initiative, we have successfully reached consumers with insights and innovation on 15 million occasions, to empower them to make better financial decisions.

25.9 million people felt financially empowered after interactions with ING. We retained our top NPS ranking in 7 out of 14 retail markets. We successfully implemented a KYC enhancement programme across all countries.

### People

In 2019, we achieved an organisational health index score of 70 percent.

Our Human Capital Return on Investment score for 2019 is 2.38.

### Environment

We use the Terra Approach to steer our loan book of more than €600 bln towards the well-below two-degrees goal of the Paris Climate Agreement.

In 2019 we completed our first analysis of five out of the nine sectors most responsible for greenhouse gas emissions

## Impact on society

# Innovation and transformation

Platforms are the success story of the digital age. So much so, that most of the world's most valuable companies are now based on platform business models. Platform leaders like Apple, Google, Amazon and Alibaba are defining the digital customer experience.

## Platforms

Both innovation and transformation play crucial roles in ING transitioning to a platform business. We rely on innovation to develop truly disruptive products, services and experiences that can help ING become the leading go-to platform for financial services and beyond and on our transformation to scale up and share these innovations across our businesses to create one user experience for all of our 38.8 million customers

People are spending more and more time on platforms. To buy things, socialise, explore, learn, travel, entertain and be entertained. And to keep people there, platforms provide experiences that are personal, instant, relevant and seamless. Experiences that are the same everywhere, no matter where users are. With every subscriber, the value of the platform increases. More users attract more producers – and the other way around.

Platform providers are obsessed with the customer experience. They use data to pinpoint the customer need and partner with third parties to ensure there is always a fitting product or service for any customer need. This ensures customers always come back to them for more.

With a shift towards platform models, to participate in that space there are three positions a company can take: become a platform yourself, provide 'capability as a service' or become a producer on third party platforms. Successful companies often play across two or three positions. ING is also following this route combining these three different strategies. The first is to become a destination platform, the 'go-to place' for financial services and beyond, a place where consumers and producers interact. Here, we need to give them very good reasons to come to our platform, something very different from what they can get elsewhere. What is offered should not only be a perfect experience, but also be the best available product and service. Examples of ING doing this are DealWise, helping clients get the most relevant deals, CoorpID, which provides a centralised digital vault for corporate clients to store and share their KYC documentation and Invisible Tickets, a seamless ticketing solution for public transport using mobile phone sensors to automatically track and charge travellers.

Secondly, in addition to pursuing strategic platform moves, ING also invests in independent initiatives in their own right, outside of the above-mentioned platform plays, such as what ING has done with Yolt, Cobase, Vakt, Komgo and Payconiq. These 'spin-out' go-to-places, are not ING-branded.

The third way is to connect to the existing platforms of others. With more and more companies and people interacting on platforms, it is important for ING to continue to be where its customers are. Here, we can either provide 'capability as a service' to other platforms, such Yolt for Business and FINN – Banking of Things, or become a producer on a third-party platform.

ING is testing and trying all three approaches to prepare ourselves for life as a platform business.

## Innovation

Innovation is at the heart of ING's Think Forward strategy. It is important that ING not only becomes an innovation-enabled organisation, but also increases the number of adjacent and disruptive

## Value spaces

To narrow down these innovation priorities, efforts are centred on certain value spaces. The following are based on emerging themes and trends applicable to customers, as well as our capabilities.

**Housing**

Connecting sellers, buyers and service providers to an end-to-end housing ecosystem.

**Shopping**

Providing customers with personalised and relevant products and services.

**Tradetech**

Using advancements such as the Internet of Things and distributed ledger technology to make international trade more efficient.

**Proptech**

Using technology to replace traditional practices in how we buy, sell, finance and manage property.

**Business financial management**

Using new technology, be the go to place for SMEs and Mid-Corps to find all the tools and service they need for financial management.

**Regtech**

Providing regulatory technology solutions to the ever increasing demands of compliance.

**Identity**

Using e-identity solutions to support people with easy authentication as well as a safe and seamless experience.

**Employee experience**

Providing a cultural, physical and technological environment that helps employees serve customers better.

innovation initiatives in the market. Developing truly disruptive products, services and experiences, goes a long way in helping ING's platform ambitions.

## Innovation approach

ING's approach is centred on two of ING's strategic priorities:

1. Increase the pace of innovation to keep satisfying customers' changing needs. These can vary widely - from what customers expect from their bank, to how they use our apps and services, to the kinds of products that help them be successful, and,
2. Think beyond traditional banking by developing new banking services and business models that the industry, or even the world, has never seen before.

To narrow down these new banking services and business models, efforts are directed into certain value spaces. These are based on emerging themes and trends for customers, as well as our own capabilities.

## ING Labs

ING Labs are environments where the bank develops disruptive ideas and brings them to market by creating minimal viable products (MVPs). We do this by combining our knowledge and network with the knowledge and skills of others. In the labs, internal and external experts in small cross-functional teams develop their ideas using ING's PACE innovation methodology (see below). The aim is to turn the idea into a customer-validated MVP within 12 months. Our approach is all about testing and validating assumptions before we build. This ensures innovations are desirable, feasible and viable.

There are ING Labs in Amsterdam, Brussels (formerly Fintech Village), London and Singapore.

Various business units and countries, such as Poland, also have their own innovation accelerators where they concentrate on improving current products and processes.

## Innovation Fund

ING allocates €25 million each year through its Innovation Fund to accelerate innovation across the bank. Funding is available to any employee who wants to turn a breakthrough idea into reality.

## Fintech partnerships and ING Ventures

ING collaborates with a wide range of partners including fintechs, its own customers, talented individuals and companies from other industries to develop innovative solutions for customers.

An innovation partnership could start with someone spotting a potential collaboration or improvement in a process that supports the bank's strategy and could create a differentiating customer experience. A common type of partnership at ING is starting a proof-of-concept or pilot with a fintech. Here, ING tests a solution for a limited time. If the proof-of-concept is successful, ING enters into a commercial contract with the partner.

ING has a global fintech network that helps orchestrate local scouting efforts and provides input on whether a partnership should be of a local or global nature. Often, partnerships allow innovative banking services to be brought to market quicker than if one of the partners had tried to do that alone. Investing in promising companies that are transforming banking is an important part of our innovation approach.

| Partnerships started | Partnerships stopped |
|---|---|
| 67 | 29 |

### ING Ventures

ING Ventures invests in fintech and fintech-related venture capital funds around the world. Through such investments, we aim to build a portfolio that accelerates the pace of innovation and create an even better experience for customers. It targets disruptive technologies that have the potential to impact ING's business to ensure customers and clients get access to best-in-class services. Based in Amsterdam but shadowing ING's geographic footprint of more than 40 countries, ING Ventures is a €300 million fund that not only drives innovation within ING, but also supports entrepreneurs with hands-on support, know-how, scaling expertise and access to ING's distribution network.

Examples include a multi-million investment in the fintech Cobase, which provides a multi-bank platform where international companies can manage multiple bank accounts, an investment in UK-based TradeIX, the world's first open platform for trade finance based on blockchain and investment in Ascent a US-based regtech company.

## PACE – ING's way to innovate

To transform the bank into an innovation-enabled organisation, a customised methodology and a set of common processes, language and tools, called PACE – the ING way to innovate, are used. PACE, developed internally, is central to providing a differentiating customer experience and uses a combination of Lean Start-up, Agile Scrum and Design Thinking methods.

A feature of PACE is continuous validation with the customer to ensure we are creating the right product or service for them. This way, we use our scarce resources to develop only what the customer really wants. PACE has been introduced and is being applied in most ING countries and business units. The establishment of a global PACE Academy, complete with online modules, helps employees work with the methodology.

Throughout 2019, there was outstanding progress in the adoption of PACE particularly in Australia, Poland and Turkey. In 2019, more than 3,000 professionals increased their awareness and knowledge of PACE through PACE Fundamentals training, while more than 480 participants from 26 PACE academies have gained in-depth capabilities in service and experiment design.

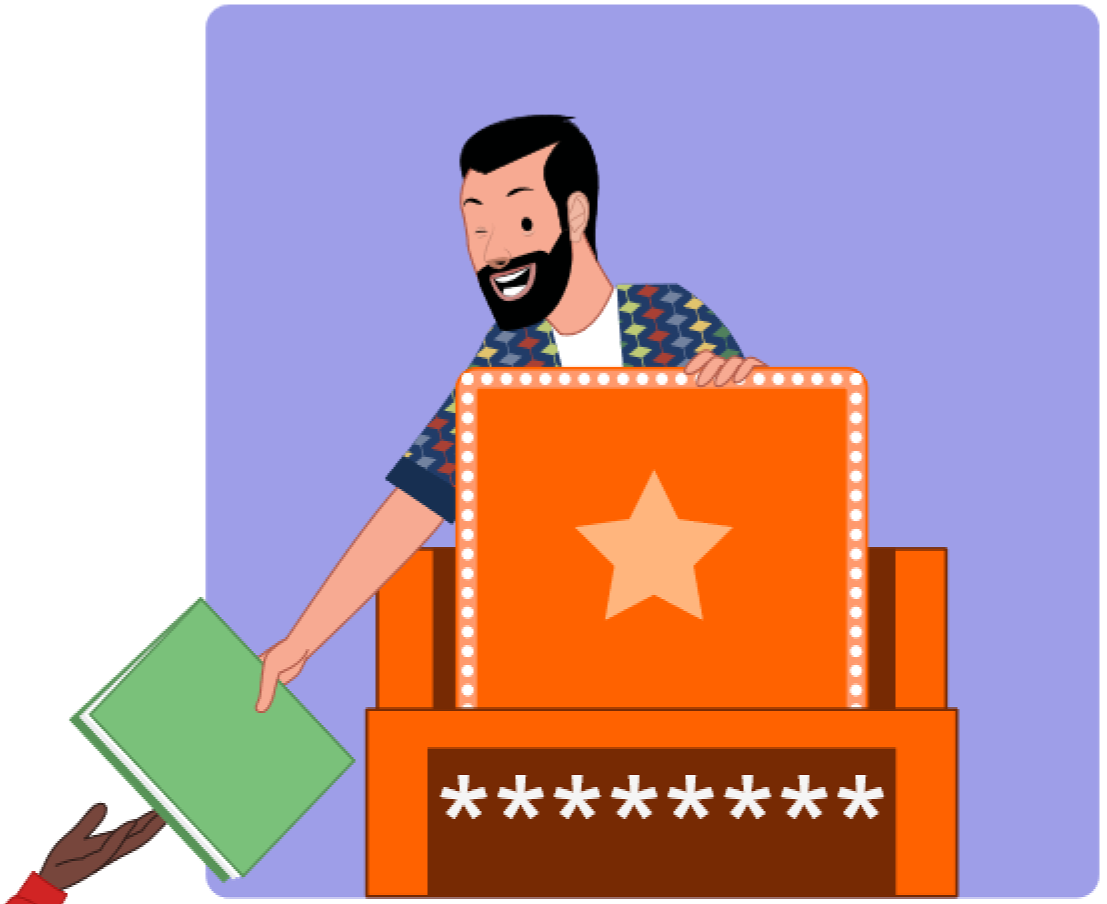
## Employee-developed innovations

INVISIBLE TICKETS

A beyond banking initiative, Invisible Tickets enables travellers to pay for their public transport invisibly. A mobile phone app using sensors automatically detects that they are embarking on a journey, whether it be by train, bus or tram. When the user arrives at their destination, the cost of the journey is debited from their bank account. For public transport companies, it improves the customer experience without any hardware investment.

dealwise

Most people like a discount, particularly when it involves their favourite brand. But currently, obtaining that discount is often too long or complex and comes with hidden clauses in small print. This is where ING's initiative DealWise plays a role. Based on customer behaviour, DealWise identifies categories and brands that individuals are interested in. A card-linked cashback solution through the ING app as well as a stand-alone app, is available for both online and offline purchases. And it's not just customers that benefit. DealWise offers an excellent solution for the pains merchants experience – delivering better customer insights and enhanced access to potential new clients. DealWise has been tested as part of the ING internet banking app and proved to have a positive impact on the Net Promoter Score and login frequency.



FINN
Banking of Things

FINN – Banking of Things is an ING open-source software solution that enables any connected (Internet of Things) device to autonomously pay for its use. Using a smart device, FINN allows business customers to add trigger-based payments to any smart device, enabling them to offer secure Product-as-a-Service business models. In 2019, FINN became part of Transaction Services/ING Tech to prepare for scale.

## Transformation

To create one user experience for all 38.8 million customers, we must become one ING. By building a global foundation that standardises how we design and manage processes, our IT infrastructure, our Way of Working and how we store and analyse data, we can offer similar products and services everywhere. To achieve this, ING announced a series of transformation programmes in 2016 to unite similar businesses and bring us closer to one mobile-first digital platform that offers a uniform and superior customer experience.

### Transformation management

Managing ING's transformation is the responsibility of the chief transformation officer and the Global Transformation Office. Transformation management is crucial in connecting all country, business line and functional change. In 2017, a bank-wide transformation management method was introduced to ensure the implementation of our Think Forward strategy.
It's a set of standardised tools and processes that include:

- Strategic portfolio management, which forms the link between strategy and implementation.
- A gated process that supports teams to continuously improve the maturity of their programmes in line with best practices.
- Ninety-day agile delivery cycles to facilitate continuous improvement, planning and prioritisation that ultimately lead to a better impact on customers and other stakeholders.

Running a bank-wide transformation is complex. It involves many interdependencies between different workstreams and may involve trade-offs in local priorities or autonomy so that we prioritise what is best for the bank on a global level. Our transformation management method helps speed up decision-making, resolve issues when they arise or adjust our planning when necessary. All this needs to be done while keeping the bank safe, secure and compliant and minimising any adverse impact.

### IT

The IT target operating model (TOM), which aims to create speed, scale and security as well as cost efficiency has gained significant maturity. We introduced one purpose, one common backlog, one technology platform, one workforce of talented engineers and one Way of Working.

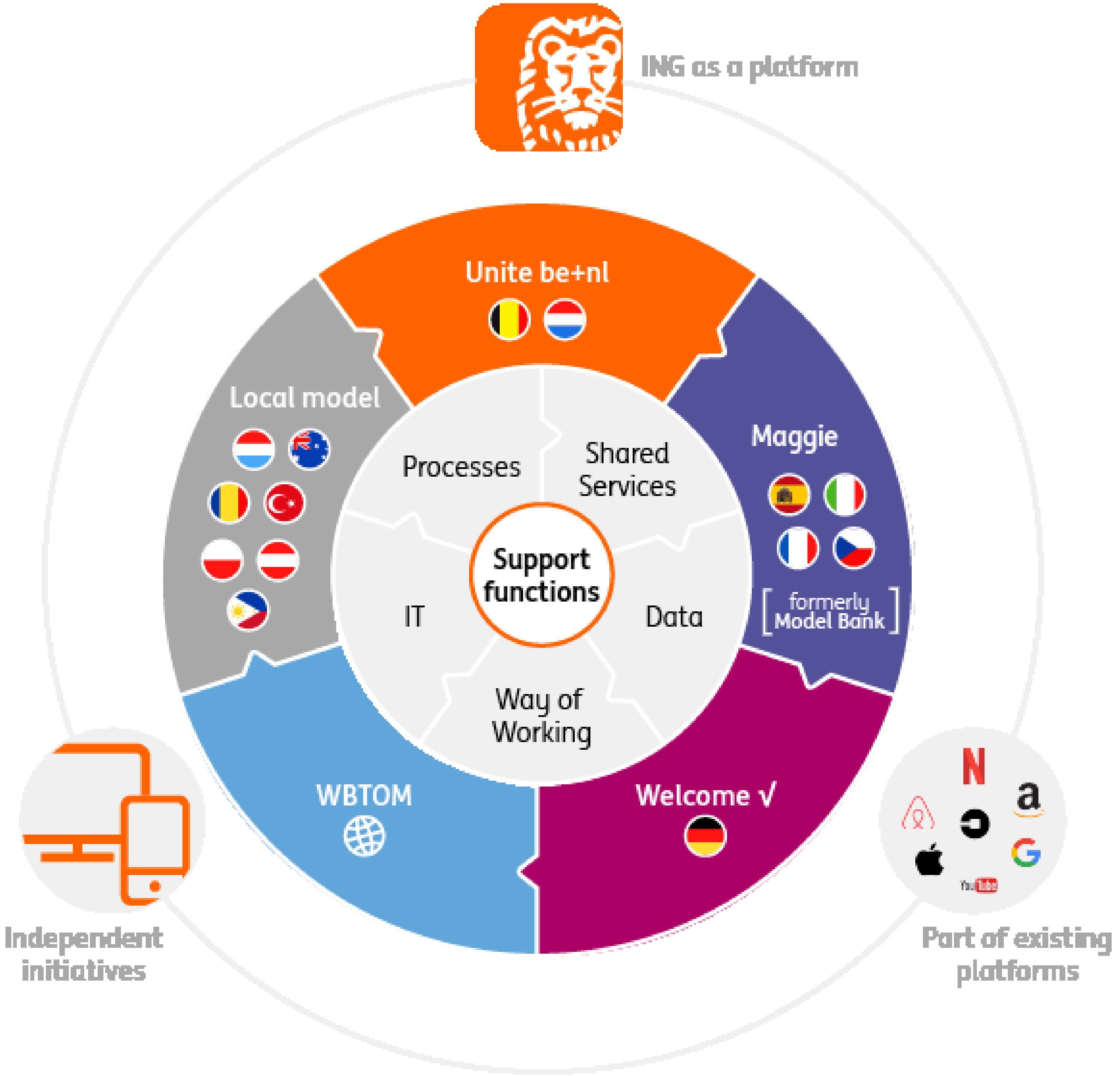
The quality of our people is crucial to the quality and efficiency of our Tech services. We build and maintain a global workforce of highly skilled engineers through global performance days where we assess and calibrate our engineers based on one engineering profile. In 2019, 82 percent of our internal engineering workforce work according to this profile.

Next to that, our one Way of Working also enables us to work globally and effectively, with agile working now in over 90 percent of our workforce in 15 ING Tech entities (up from 60 percent in 2018).

#### Touchpoint

Touchpoint is the foundation that enables producers to share services with ING entities, allowing them to create business-wide propositions across the bank and to third parties. Touchpoint reduces time to market and the volume of new ING propositions and services for customers. It also contributes to ING's platform ambitions by providing solutions that are globally scalable.

## Business transformation programmes




**Unite be + nl**

**Uniting Belgium and the Netherlands to offer the same customer proposition across two countries. Combining both countries' strengths for a more consistent customer experience, with one integrated banking platform and a harmonised business model.**

We have built one cross-border delivery organisation in Belgium and the Netherlands, combining business and IT. We have reduced our branch footprint and introduced common digital channels (OneApp and OneWeb) that have been piloted with the first groups of customers. We also introduced one assisted channel platform for all customer-facing colleagues in Belgium and the Netherlands allowing them to support customers better and in a more uniform way.

**Welcome**

**Creating a digital go-to financial platform in Germany offering its own and third-party services.**

Early 2019 we completed the programme after introducing a new mobile app (OneApp) and a Go2Place platform including e-signature, multi-banking account overview, forecasting, third-party services and an end-to-end digital process for account opening, consumer loans and mortgages.

**Maggie**

**Uniting our retail banks in France, Spain, Italy and the Czech Republic onto one, scalable banking platform to provide one customer experience across the four countries.**

In Maggie we are building a best-in-class mobile and digital platform based on scalable IT infrastructure. Czech Republic was the first country to go live in December 2018. We now have over 450K active customers and the platform is ready to onboard customers from Italy, Spain and France in the coming years. Also, in 2019, the Maggie team adopted ING's One Way of Working, enabling faster delivery going forward.

**WBTOM**

**Digitalising and standardising WB products, processes and customer propositions across all countries.**

We improved the experience of our Wholesale Banking customers through the implementation of target solutions in Financial Markets, Lending and Transaction Services, setting up a pan-European Daily Banking desk and by expanding our client platform InsideBusiness which is being used by more than 18,000 international clients. We also optimised our operations by decommissioning 726 IT applications and growing our shared service centres in Manila and Bratislava to more than 1,500 operations experts.

Touchpoint has been made available in and Asia. In 2019, it has enabled the delivery of several business solutions, including PSD2, covering 17 countries across Europe for Retail and Wholesale Bank, ING's new, mobile bank in the Philippines, ING's digital insurance platform and the first open banking API. Many programmes, such as Unite be + nl and Maggie have been enabled by Touchpoint. Touchpoint now provides its users with access to 21.8 million customers (57 percent of our customer base).

### ING Private Cloud (IPC)

ING Private Cloud (IPC) is the digital platform used to store and process data and IT services such as mobile phone apps. It is one of the steps ING takes in giving customers a consistent experience in a secure and reliable way. IPC standardises our IT infrastructure, simplifies and streamlines existing processes, and brings an automated and self-service infrastructure to development and operations teams. The IPC has reduced our infrastructure time-to-delivery from an average of more than 10 days to less than an hour.

In 2019, we expanded the service portfolio to support further onboarding in the IPC and doubled global adoption of IPC, from around seven percent of global infrastructure in 2018 to around 15 percent by the end of 2019.

## Security

Cybercrime resilience is a major priority for ING to keep the bank secure and safeguard customer trust. This is especially relevant as ING pursues platform business models, expands mobile and other internet-based products/services, further digitalises processes and opens up PSD2 interfaces to the outside world.

Like other companies, ING is regularly the target of cyberattacks, like Distributed Denial of Service (DDoS), targeted attacks (also called Advanced Persistent Threats) and ransomware.

These attacks could have an adverse effect on our business, reputation, revenues, operations or financial health especially when they breach data protection rules and jeopardise confidential information of our customers or partners.

In 2019, we saw increased professionalisation and automation of criminal organisations. Relatively unskilled, criminally motivated hackers adopted the tactics, techniques and procedures of more sophisticated nation-stated backed adversaries. There is also evidence that techniques are becoming more widely commoditised with cybercrime-as-a-service being made available.

Techniques used to gain unauthorised access have become increasingly sophisticated. We have faced, and expect to continue to face, an increasing number of cyberattacks.

### Preventative measures

Preventative measures are in place for ING data centres and organisational resilience is continuously tested. A dedicated cybercrime expertise and response team continues to predict, protect, detect and respond to e-banking fraud, DDoS and targeted attacks.

Threats are closely monitored in cooperation with other banks and government institutions. ING maintains a strong global cybercrime alliance with the financial industry. Cybercrime travels across sectors and borders, and therefore we encourage a common, cross-industry response where companies and public authorities work together to combat crime. ING recognises the value of an effective regulatory framework and is in favour of cybersecurity being led more by actual cyber threats, and less by rule-based compliance. The ECB's TIBER-EU framework for cyberresilience testing is a good example. Testing critical systems on actual, real-life threats helps entities gain insight about their protection, detection and response capabilities.

Training and awareness for customers and employees is a crucial part of ING's preventative measures. Our all-staff online integrity programme is regularly updated with the latest cybercrime trends and prevention measures. In addition, special risk days are organised for staff, highlighting specific themes and how to remain resilient against them.

'White Hat', or ethical computer hackers who break into protected systems and networks to test and assess their security, are also invited to share their observations using ING's Responsible Disclosure programme.

In 2019, we also further standardised and automated our User Access Management (UAM) processes and day-to-day practices.

### Cybersecurity incidents in 2019

During 2019, no major cyber security incidents occurred despite the increasing sophistication of attacks. The volume and duration of DDoS attacks is increasing, especially in Belgium, the Netherlands and Romania. One of those DDoS attacks in Romania meant customers couldn't access our services for a couple of hours. No customer claims were made, nor any financial losses incurred.

## Data

Building the digital bank of the future is all about data. Data can provide meaningful insights that help us to understand customers better and enable us to develop innovative products that personalise the customer experience. In addition, data can be used to improve processes and to make better management decisions.

To make raw data meaningful, it needs to be sorted, harmonised and put into context. To do this in an effective way, ING has a data management strategy with major elements of the strategy being standardised data definitions (ING Esperanto) and data models (Esperanto Warehouse Model). Both contribute to the availability, quality, integrity, usability, control and global governance of our data.

### Data privacy

People entrust banks with confidential information that they expect to be kept safe. It is important that we maintain that trust and comply with our legal obligations around data protection, which can differ from country to country. ING is transparent about what it does with the personal data of customers, employees, suppliers and business partners, and only processes data for specific business purposes. Our approach can be summarised as: the right people use the right data for the right purpose.

ING has been subject to the data protection requirements set out in the EU's General Data Protection Regulation 2016/679 (GDPR). We have updated our Global Data Protection Policy (GDPP) accordingly and are implementing revised and new requirements in each country. To know more about what personal data ING collects, what we do with it and who we share it with, go to our Privacy Statement on ing.com or any local ING websites.

### Data ethics

When it comes to data ethics, ING acknowledges the importance of respecting the expectations of its stakeholders, for instance, when new processes or products are introduced to enhance the customer experience. ING's data ethics approach is an integral part of our decision-making process and is embedded in ING's Orange Code. It consists of data ethics values and principles that apply to everyone in our organisation. Both global and local data ethics councils are in place to advise ING business units and help ensure that complex queries or dilemmas on data ethics are dealt with properly.

### Analytics

ING's Analytics Unit was established in 2018 to accelerate the bank's analytics capabilities and lead the transformation to become a truly data-driven company. The unit has two main objectives: promote data fluency among employees and strengthen analytics delivery.

The department is responsible for the global coordination of analytics activities, better alignment with the business strategy, establishing one analytics and data community that supports knowledge sharing and apprenticeships and better use of investments in tooling, talent and partnerships. It is organised around nine main capability domains and supported by analytics teams and common infrastructure.

### Building data and analytics capabilities

ING's quest to become data-driven starts by unifying the analytics capabilities of our organisation. This allows us to accelerate change, scale and innovate for customers. Currently, more than 100 data scientists work across Analytics centres of expertise (CoEs) and countries.

In 2019, an Analytics Academy was launched to put analytics capabilities within everyone's reach. A bank-wide Analytics for All campaign was also launched for employees encouraging them to be data-fluent and think like a data scientist. To help develop data science capabilities, we also added an analytics track to our graduate programme, the International Talent Programme. To ensure that ING stays at the cutting edge of AI research, we also collaborate with various academic institutions, including Dutch-based university, TU Delft.

### Strengthen analytics delivery

Analytics is organised globally into nine capability areas with CoEs in customer interactions, customer dialogue, risk and pricing, financial crime and regtech, intelligent operations, innovation and beyond banking, people and finance and wholesale banking.

Specifically, the CoE for financial crime and regtech provided multiple products, helping to improve risk mitigation including:
- Detection of smurfing cases in Turkey.
- Detection of unknown suspicious activities through anomaly detection for financial institutions.

**Boosting artificial intelligence**

To further boost and highlight the importance of AI in the Netherlands, ING joined four other Dutch companies for the Kickstart AI initiative which aims to accelerate and promote the development of AI technology and nurture AI talent. This effort will add educational capacity, foster the development of an AI community and reinforce the position of the Netherlands as a competitive and relevant AI hub.

### Robotics

ING has been experimenting with chatbots since 2016. We've now passed the exploration phase and are now looking to create value and scale. The benefits for customers include a simplified user experience, 24/7 contact and a reduction in human errors.

In Germany, the virtual assistant pING answers questions on products, services and generic FAQs. In 2019, pING conducted over 10 million customer sessions, with more than 80 percent of questions answered.

In Turkey, the chatbot INGo answers questions on loans, cards, accounts savings, currencies and insurance products via Facebook Messenger, the mobile app and the website. INGo also helps with applying for a loan. In 2019, INGo took part in over 4.5 million customer sessions, with 89 million lira worth of approved loans done via a credit advisor in the chatbot.

### Digitalising manual activities

Robotic Process Automation (RPA) uses robotic software scripts to digitalise manual activities. In 2019, an additional 100 robots were added to the 1,200 in operation in 2018. Of the robots added in 2019, around one-third were put to work on KYC processes.

More units were onboarded on the global robotics as a service platform including Belgium, Risk and Legal. This way, business units can benefit from a central compliant environment hosted by a global Tech squad.

An example of one of the solutions on this platform is the RoboPlatform developed by ING in Poland. A digital assistant for Operations and Customer Support, the RoboPlatform performs repetitive activities which leaves employees more time to interact with customers and complete more complex tasks. The RoboPlatform is now the standard in ING France and for several KYC processes in the Challengers & Growth Markets countries. ING has a mix of external and an internal RPA products to minimise dependencies on one provider.

## Operational excellence

We promise customers we'll keep getting better. One way is by simplifying and standardising end-to-end processes. Some processes are internal, while others directly impact the customer. Making them easier leads to a superior customer experience, higher quality of processes and greater efficiency.

### Shared services

Operational, IT and support tasks are being centralised in shared service centres. In 2016, ING set up a fully owned service company ING Business Shared Services BV (IBSS) to consolidate all such centres in one specialised non-banking legal entity. Currently, IBSS has four foreign branches. The Bratislava and Manila branches are multi-functional centres providing services to all domains with an extensive operational platform targeting Wholesale Banking, Retail and Group services. Branches in Poland (Katowice and Warsaw) and Romania (Bucharest) predominantly provide ING Tech services. IBSS branches are moving into the direction of multifunctional shared service centres providing services to both Retail and Wholesale Banking as well as to global functions. Manila now supports ING retail business in Australia and the Philippines. Katowice provides card processing services to ING in Poland and France. Bucharest hosts services for operational risk and compliance while Bratislava expanded its Pan-European Desk service for over 100 internal clients. In 2019, IBSS was also set up in Warsaw with an emphasis on data analytics/risk modelling.

Overall, IBSS has become a professional services organisation that employs around six percent of all ING colleagues globally and is continuing to provide more specialised and complex services. In October, Manila was awarded the Circle of Excellence Award for Technology Company of the Year and Executive Leadership Team of the Year at the Asia CEO Awards.

### Global Process Management

ING's Global Process Management (GPM) department was established in 2016 to improve the customer experience. It does this by introducing a single, global approach to improving end-to-end processes and a common way to manage those processes and standardise across business units. Achievements in 2019 include designing global regulatory and HR processes and defining an approach for implementing global processes across ING.

### Way of Working

To respond more quickly to changing demands and customer feedback, encourage an innovative mind-set and engage employees, ING's one Way of Working (WoW) unites employees in multidisciplinary, cross-functional teams. End-to-end responsibility empowers employees to collaborate more easily and effectively across the organisation.

An agile WoW has been introduced in the delivery area of the Netherlands, Belgium, Spain, Poland, Austria, Romania, France, Australia, Luxembourg and the Czech Republic, as well as in COO Finance. Design and implementation for the remaining countries and business units are in full swing. ING is one of the first banks to adopt the methodology.

Uniting so many different cultures is a challenge that requires a behavioural shift, guided by our Orange Code. Bridging cultural differences between countries is supported by WoW ambassadors, training programmes and WoW bootcamps.

## “Touchpoint will help ING to become one digital platform”

“Touchpoint is a technology platform that makes it possible for ING to build scalable business propositions we can share across borders,” says Danny Wijnand, global tribe lead Touchpoint. “It’s bringing us closer to our ambition to create a banking platform that offers customers the same experience everywhere. The Touchpoint platform has all the tools and technologies our teams need to reach more customers faster, and in more countries, without having to reinvent the wheel each time. For example, in Manila, it was possible to build ING’s newest mobile Retail bank in just nine months using common security and authentication solutions. Another example is our partnership with AXA. The insurance products ING offers customers via its banking app were developed using the unified design system. Touchpoint is also available to third parties via ING’s Developer Portal. From here they can connect to our common PSD2 functionalities and shared APIs in 17 countries, a vital facilitator for open banking. We’re currently using Touchpoint in Europe and parts of Asia, with the intention to make it available everywhere in the coming years. In this fast-moving world where competition is fierce, we need to bring new innovations and functionalities to our customers much faster. Touchpoint has a crucial role in this. I’m very proud of what we have achieved so far as Touchpoint is helping ING to become one digital platform.”

## “We need to use our industry knowledge and expertise to empower investors to make smart financial decisions”

“The ValueX project gives institutional clients access to asset classes that have high entry barriers, with a particular focus on the environmental, social and governance (ESG) segment,” says Dirkjan Ochtman, tech lead for the project. “Think of loans in large renewable energy, infrastructure or commercial real estate projects. Currently, the process for trading these assets is complex and inefficient, large ticket sizes making it difficult for investors to participate. Plus, investors are expected to have in-depth expertise and knowledge. Our goal is for this to enhance the customer experience for mid-market institutional investors.

“ValueX democratises access to these asset classes, distributing ticket sizes that match any type of investor demand. It enables professional investors to participate in high quality, currently illiquid assets that reflect investors’ ESG values. With distributed ledger technology (DLT), it standardises and automates the investment process. Assets are digitalised into security tokens for example, to make post-trade administration easier and cheaper. Applying DLT will also give investors easy access to asset documentation, allowing them to familiarise themselves with the assets’ key indicators before investing in them.

“We need to use our industry knowledge and expertise to not only meet, but exceed the ever-increasing expectations of investors and empower them to make smart financial decisions.”

# Our business

We achieved good results in 2019 with solid profitability and healthy growth in both lending and deposits. Net core lending grew by €17.2 billion over the year, with net inflow of customer deposits growing by €23.4 billion. We added more than 830,000 primary customers, which shows that our customer experience continues to be differentiating and drives growth. With digital disruption changing customer expectations we're looking for new ways to stand out from the crowd.

FY2019 ING Group net profit

**€4,781 million**

FY2019 underlying return on equity

**9.4 %**

FY2019 net core lending

**+€17.2 billion**

FY2019 net customer deposits

**+€23.4 billion**

## Our markets

ING's retail business serves 38.8 million customers. In most of our retail markets we offer a full range of banking products and services, covering payments, savings, insurance, investments and secured and unsecured lending. Our wholesale banking business offers clients advisory value propositions such as specialised lending, tailored corporate finance and debt and equity-market solutions. Our clients range from large companies to multinational corporations and financial institutions.

Our **Market Leaders** are Belgium, the Netherlands and Luxembourg. These are mature businesses where we have strong positions in retail and wholesale banking. We're investing in digital leadership to deliver a uniform customer experience with one customer interaction platform and a harmonised business model.

Our **Challengers** markets are Australia, Austria, Czech Republic, France, Germany, Italy and Spain. Here we're aiming for a full retail and wholesale relationship, digitally distributed through low-cost retail platforms. We also aim to use our direct-banking experience to grow consumer and SME lending, and our strong savings franchises to fund the expansion of wholesale banking in these markets.

Our **Growth Markets** are universal banks with a full range of retail and wholesale banking services in countries whose economies have high growth potential. These include Poland, Romania and Turkey. In these markets we're investing to achieve sustainable franchises and will focus on digital leadership by converging to a mobile-first model and prioritising innovation. Our newest Growth Market is ING in the Philippines, where we launched an all-digital retail bank in November 2018.

**Wholesale Banking** is an important and integral contributor to ING's commercial performance. With a local presence in more than 40 countries, ours is a sector-focused client business providing corporate clients and financial institutions with advisory value propositions, such as specialised lending, tailored corporate finance and debt and equity market solutions. We also serve their daily banking needs with payments and cash management, trade and treasury services.

### Achieving our business goals

Banks are operating in a fast-changing environment marked by new competitors, new customer expectations, increased regulation and higher capital requirements. At the same time, persistently low interest rates put pressure on our savings business model. We are finding new ways to be relevant to our customers.

To achieve our business goal of creating a superior customer experience, we focus on four strategic priorities: earning the primary relationship; thinking beyond traditional banking to develop new services and business models; using our advanced data capabilities to understand our customers better and meet their changing needs, and innovating faster.

## Earning the primary relationship

Earning the primary relationship is a strategic priority for ING as it leads to deeper relationships, greater customer satisfaction and ultimately customers choosing us for more of their banking needs.

We don't only want our customers to do some of their banking with us, we want to be their first partner, where they deposit their salary, handle their payments and do most of their other banking business. At the moment, ING has 13.3 million primary relationships, and the target is to grow this to over 16.5 million by 2022.

## Market Leaders highlights

Launched **Payconiq** in the Netherlands: customers can pay with their smartphone in stores and online.

**Apple Pay** introduced for customers in the Netherlands.

Customers in Belgium can now use voice-activated **Google Assistant** to look up information on ING.

In Belgium, customers can now start the **mortgage process online**

We offer large mid-corporates in the Netherlands a scalable self-service digital marketplace called **Invoice Trader** where they can trade their receivables to external investors.

In Retail Banking, we define primary customers as those with multiple active ING products, of which one is a current account where they deposit a regular income such as a salary. For Wholesale Banking, a primary client is an active client with lending and daily banking products, and at least one extra product generating recurring revenues over the last 12 months.

Customer numbers continued to grow in 2019. Primary customer growth across retail segments in 2019 included 63,000 for the Benelux, 526,000 for the Challenger markets, and 242,000 for Growth Markets. In Wholesale Banking, the number of primary customers grew by three percent as we deepened our relationships, particularly in the daily banking space with existing lending-only clients in the US and EMEA.

### Customer promise

Banking doesn't have to be difficult and time consuming. Clear products, plain language, fair prices and simple processes save customers time and money. ING promises to make banking clear and easy, to provide services anytime anywhere, and to keep getting better.

We are driven by our purpose to empower people to stay a step ahead in life and in business. We do this by constantly innovating to deliver a differentiating customer experience that aims to be smart, personal and easy.

Across ING, digital channels are accounting for an increased number of contacts with retail customers. For example, a growing share of retail customers only interacts with ING on their mobile device, up from 12 percent in 2016 to 37 percent in 2019. The number of interactions grew by 80 percent since 2016, reaching 4.5 bln interactions in 2019, with mobile interactions increasing to 82 percent in 2019, versus 52 percent in 2016.

Given the rise of digitalisation, and growing competition from disruptive newcomers to our sector, we want to do more than just live up to our Customer Promise. We want to surpass people's expectations.

We want to use the insights from our 4.5 billion customer interactions to offer a personalised and empowering experience, giving them even more reasons to interact with us. This is how we can differentiate ING from other banks and become an essential part of people's digital lives.

One of the ways we measure our progress is the Net Promoter Score (NPS), which measures customer satisfaction and loyalty (whether they would recommend ING to others). The score is calculated as the difference between the percentage of promoters (who rate ING as 9 or 10 out of 10) and detractors (those scoring ING below a 6). Our aim is to achieve a number one NPS ranking in all our retail markets, with a 10-point lead over our main competitors. Based on a rolling average of our NPS scores in 2019, ING ranked number one in seven out of our 14 retail markets Ⓐ.

In Wholesale Banking, the overall NPS score improved by 11 percent year on year to 49.6 (on a scale of -100 to +100), outperforming the industry benchmark. This suggests clients appreciate our new approach (see 'Unleashing sector potential' below). The number of surveys sent increased by 28 percent year on year, and the response rate increased from 46.6 percent to 50.6 percent. The NPS growth for Platinum clients decreased year on year but the NPS of all the other segments increased. Overall level of satisfaction went up from 8.4 to 8.5. We now have NPS scores from WB clients generating 42 percent of our revenues.

We added a further five countries to the NPS programme in 2019, which is now running in 26 Wholesale Banking markets. In 2019, NPS played an even more prominent role in gauging client satisfaction in Wholesale Banking, with clearly defined KPIs applied across all parts of the business and a more active feedback process.

## Unleashing sector potential

In 2019, we remained focused on servicing our corporate clients with relevant advice, data-driven insights and customised, integrated solutions that make their day-to-day banking more efficient and support their business ambitions.

This is in line with the revised Wholesale Banking strategy we introduced in 2018 to enable us to adapt to and overcome a challenging and complex market environment, as well as increased regulatory requirements, evolving technology, greater competition and our clients' changing needs.

We developed our sector strategy over the year, pairing local and global insight with sector knowledge and financial expertise. 'Commercial passports' give us insight into what services we provide to each client and the regions where we serve them, while our uniform client segmentation framework helps us tailor our daily banking and advisory value propositions to their specific needs.

Several deals in 2019 reflect this sector focus. In the telecom, media and technology space, ING acted as financial advisor for global asset management company DWS in the merger of leading Dutch data centres NLDC (DWS's infrastructure business acquired NLDC from Dutch telco KPN in 2019), and The Datacenter Group (TDCG) group. By advising DWS, ING enabled it to make its maiden investment in the telecom infrastructure sector and created the largest player in the Dutch market. In the food and agribusiness sector, ING coordinated the largest-ever sustainability improvement loan in commodity trading for China's multinational leading food and agri company, COFCO International. The $2.1 billion loan links COFCO International's interest rate to its sustainability performance and rating. And in the sustainable finance space, ING added another first to its growing sustainable finance deal portfolio in Asia/Pacific. We provided a subsidiary of Sunseap Group, a Singapore-based renewable energy company, with $37 million to build rooftop solar projects in Singapore.

In Transaction Services, we optimised our client-facing model, streamlining our products and services and increasing efficiency in sales support. We also brought together various client trading activities scattered across Financial Markets into one team and further embedded the FM business into our client organisation with a new sales model that is fully aligned with the rest of Wholesale Banking. This will help to maximise cross-buy opportunities and improve our client-service delivery with consistent products and a one-client approach everywhere.

## FLOWCAST

ING Labs Singapore launches pilot in 2019

Boosts AI capabilities

ING Ventures co-leads $3 mln Series A investment

Creates predictive models to reduce risk...

...and unlock credit to businesses

## fintonic

ING leads €19 mln funding round

active users increased by 46% in 12 months

Personal finance manager with propietary marketplaces and credit scoring

Increased the number of lending partners from 6 to 17 (+183%)

Presence in Spain, Chile and Mexico

## YOLT

Started in 2016

>1.2 mln registered customers

Yolt Technology Services launched

2019 Personal Finance App of the Year award

4.1 star rating on the iOS app store

## Platform thinking

ING's purpose is to empower people to stay a step ahead in life and in business. To continue doing this in a world that is changing quicker than ever before, we need to be where our customers are – on digital platforms.

Thinking beyond traditional banking is crucial to find new ways to be relevant to customers. Here, open banking offers opportunities. By partnering with others or developing our own digital platforms, we can offer customers new and complementary services that go beyond banking – and create new revenue streams for ING.

Platforms empower customers by providing them with a range of primary needs in one place. Through frequent user interactions, platforms also generate large amounts of data. By mastering data skills, platforms get to know their customers and their needs increasingly well, enhancing the platform's value, and that of its users.

The other advantage with platforms is that they are scalable, open and borderless, offering their users the same experience everywhere. With little to differentiate one bank's products from another, we believe it is customer experience that will set ING apart.

Read more about platforms in the 'Innovation and transformation' chapter.

ING has different faces in different markets and different banking interfaces, each with its own look and feel. By uniting our platforms, processes and products we can provide a consistent customer experience in every country. This is driven by a growing desire for similar online experiences in an increasingly digital world.

We are making progress in achieving this in a number of ways, including by working internally to establish a truly cross-border banking platform that aims to provide one unique, uniform customer experience that is best in class and leverages scale, and by pursuing strategic platform initiatives.

This was the year that Unite be+nl became a reality for our customers in the Netherlands and Belgium, with the introduction of common digital channels in these countries. Unite be+nl is one of several programmes we are rolling out to build 'one ING' and is an important step towards a global platform. Maggie (formerly Model Bank) is our transformation programme uniting our retail strategy and capabilities in Spain, Italy, France and the Czech Republic. Its emphasis is on increasing our digital interaction with customers, improving customer satisfaction and boosting sales.

Read more about our business transformation programmes in the 'Innovation and transformation chapter'.

### Platform initiatives

Our Yolt aggregator app was named Personal Finance App of the Year at the 7th Annual Payments Awards in the UK. We extended the app with Yolt Pay, a new feature that enables users to move money between their accounts and make payments to friends and family from supported banks.

In 2019, we increased our stake in international payments platform Payvision to make it a wholly owned subsidiary. This is an important step towards becoming the preferred platform for business customers and strengthens ING's digital payments business, especially in e-commerce. Payvision facilitates more than 80 payment methods in 150 currencies. In 2019, Payvision and ING introduced the omnichannel (eCom + in-store) proposition for corporate clients. ING and Payvision combined commerce solutions proposition helps merchants offer our clients' shoppers a seamless checkout experience across all channels.

Through ING Ventures, we are continuing to invest in fintechs, focusing on collaborations that support our strategy of creating a differentiating customer experience. In 2019, we made a further multi-million euro investment in Spanish-based fintech Fintonic. Fintonic is the leading finance app in Spain. It provides financing and savings solutions that help users manage their personal finances more effectively.

We've invested in Flowcast, a tool we hope to use to benefit Wholesale Banking clients The fintech start-up uses machine learning algorithms to improve the credit decision process. Its predictive models reduce risk and unlock credit to businesses. The investment is a boost to ING's AI capabilities.

We also invested in multi-bank platform Cobase, which makes it easier and more efficient for international corporate clients to work with multiple banks. As a cloud solution, Cobase minimises the IT effort for clients and does not require investments or long-term contracts for licences or hardware.

## Beyond banking platforms

In 2019, we introduced the first products resulting from our collaboration with insurer AXA, offering customers personalised insurance services in a clear and easy way via the ING mobile app. Targeting six of our Challengers markets, the partnership aims to provide insurance products and related services through a central digital insurance platform. We launched seven products in four countries: Italy, Australia, Germany and France, and grew the team in our central Paris office, working closely with all our markets. The first product, instant travel insurance through a mobile phone, was launched in Italy. Geo-localised travel insurance can be activated with just a few clicks on a smartphone from the airport or country of destination.

In Australia, we widened our digital insurance portfolio by adding motor and travel insurance to our existing home insurance offer. The motor insurance coverage has been particularly successful with more than 1,000 new customers a week now covered following its launch in May 2019. And in Germany, ING customers can now secure the repayment of their mortgage in the event of death.

We built on our beyond banking proposition with third-party offerings such as ING+Deals in Belgium and ING Punten in the Netherlands. ING+Deals, launched in 4Q 2018, is a cashback platform for customers, made possible by exclusive deals ING has negotiated with various A-brands (40+ brands offering over 45 deals a month). It has 150,000 users who to date have received more than €400,000 cash back, generating €2 million for the participating brands. In addition, participating customers increased their interactions with ING's online channels by more than 20 percent. ING Punten, a shopping platform for customers in the Netherlands to increase loyalty and drive digital interactions, is also partnering with trusted A-brands. In 2019, 1.1 million products were sold, delivering a turnover of €31 million.

Following our 2018 acquisition of a 90 percent stake in Dutch digital real-estate platform Makelaarsland, which allows people to buy or sell homes online independently or with support of a local Makelaarsland agent, we achieved a number of milestones in 2019. These include successfully launching a home buying proposition, expanding the agent network to 20 agents – now covering half of the Netherlands – and creating strong links between ING's mortgage advisors and Makelaarsland's agents.

In the fourth quarter, ING launched real-estate marketplace Scoperty across Germany, a joint venture with Pricehubble and Sprengnetter, which aims to bring transparency to the German housing market. Based on high-quality data and machine learning, the Munich-based proptech company aims to show all 40 million properties in Germany and to connect potential buyers and sellers. Scoperty was initially piloted in Nuremberg with more than 100,000 properties, before expanding nationwide by the end of 2019. More transparency in the German residential housing market can mean a broader offering of properties for consumers. The team is working on pre-qualifying potential homeowners by aligning with Interhyp's mortgage process. Interhyp is ING's independent mortgage brokerage platform in Germany and Austria. For sellers and real-estate brokers this pre-qualification has important value in their choice of accepting offers from buyers. As part of the network effect, pre-qualified buyers may even benefit from three days access to new home listings. Interhyp, which offers access to 500 mortgage lenders, had a record year in 2019, with €24.5 billion in new residential mortgages, and 9.0 percent market share in Germany.

## Differentiating customer experience

Understanding our customers better and meeting their changing needs is core to what we do. In 2019, we continued to innovate to improve the banking experience for our customers, while helping them transition to a more efficient and more sustainable economy. ING's ambition is to be a leader in terms of the digital banking experience, offering our customers everywhere the same empowering and differentiating experience and making banking frictionless. In addition to uniting several of our retail businesses on digital platforms that will provide the same customer experience everywhere, for the first time we also have a shared brand direction and our first global tagline. The 'do your thing' tagline articulates ING's purpose and our customer promise. It encourages people to do more of the things that move them or their business. It's not about irresponsible behaviour, but about people being free to live the life they want to live, knowing they are making their world a little better for it.

Launched in the Netherlands in January 2020, the new brand direction and tagline will be rolled out across ING during the year and used in all our business units to bring our customer experience to life.

Our advanced data capabilities are an important asset in helping us improve the customer experience and earn the strategically important primary relationship. We rely on data to understand what customers want and need. We use these insights to personalise our interactions with customers and empower them to make their own financial decisions.

Our customer-facing platforms offer multiple touch points to interact with customers and collect data that we use to define customer journeys; for example when and where they choose to do their banking, the device they use and the services they prefer. We test these insights with feedback from customers to continuously improve our services.

## Challengers markets highlights

In Austria, we expanded our product range to include mortgages in cooperation with ING-owned mortgage broker **Interhyp**.

We help customers in Germany to better manage their money with a new feature notifying them of **upcoming payments**

Introduced **Apple Pay** for customers in Spain.

The use of mobile contactless payments in Germany rose after the launch of Google and Apple Pay.

Australia and Spain achieved #1 NPS rankings, demonstrating the value of our **Think Forward** strategy.

One of the ways we're working to enhance the customer experience is through our transformation to a customer-focused organisation. The benefits of introducing one Way of Working (WoW) across ING include transparency, wider alignment, increased speed and predictability in product delivery and, most importantly, putting the customer first.

More examples of how we're providing a differentiating customer experience come from Poland, where Wholesale Banking clients can now sign credit documentation electronically, and Belgium, where customers are able to begin the mortgage process online.

In November 2019, we held our first global customer experience (CX) day. The focus was on making banking frictionless through many small improvements that make it more personal, easy and smart, and by working to eliminate or minimise any compromises to the experience resulting from backlogs or other priorities.

For example, in Poland one result of CX day was an improvement to Moje ING that improves the communication process for entrepreneurs applying for a loan, making it clearer and more timely. ING in Romania introduced biometrics to authorise customers to do payments. Colleagues in Spain found a better way to track their customers' experience and also developed functionality on their banking app to allow them to easily schedule branch appointments. In the Netherlands and Belgium, 2,000 participants made 565 improvements for our clients.

## Growth Markets highlights

**Apple Pay** introduced for customers in Romania.

In Poland, customers can add their Visa debit card to their Apple Wallet using the **Moje ING** app.

Customers in Poland can now use voice-activated **Google Assistant** - without logging in - to check their balances or to make transfers between accounts.

To help customers in Poland better manage their money we now offer features notifying them of **upcoming payments**.

In a first for ING countries, business customers in Poland can use Garmin Pay and Apple Pay, contributing to a further increase in **mobile contactless payments** there.

In Turkey, we can see in real time when customers have a problem at our ATMs and **proactively call them** to try and solve it.

We're on the right track. Among other achievements, ING topped Forbes' inaugural World's Best Banks list in 2019. The survey asked 40,000 customers in almost 24 countries about their opinions on the banks they use. ING was placed among the best-performing banks for customer-centricity in Australia, Austria, Belgium, France, Germany, Italy, Poland, and Spain. And we topped the rankings on both trust and digital services.

In Australia, new research in 2019 found ING had the highest customer satisfaction among retail banks, scoring well above the industry average. The 2019 Australia Retail Banking Satisfaction study by JD Power measured the satisfaction of nearly 5,000 banking customers.

## Know your customer

Just as we need to know our customers better to deliver better products and services, we also need this knowledge to ensure we do not accept people or institutions who misuse the financial system. We are making progress strengthening our global KYC organisation and activities throughout ING. We are using technology and our innovation skills to make improvements and rolling out global KYC solutions that all countries can connect to.

ING continues to work on the global KYC enhancement programme, which emphasises regulatory compliance as the key priority. This is a sizeable operation as we have activities in over 40 countries and have more than 38 million customers. The programme encompasses all client segments in all ING business units.

We are also working with local authorities, law enforcement agencies and other financial institutions to fight financial and economic crime. In 2019, ING was one of five banks in the Netherlands to join forces in the fight against money laundering. The ambition is to investigate the set-up of a cross-bank organisation that will monitor payment transactions: Transaction Monitoring Netherlands (TMNL). Together with the Dutch Banking Association (NVB), we are involved in a feasibility study into the technical and legal challenges involved. In the proposed new plans, we are collectively looking for cooperation with Dutch authorities, including the Financial Intelligence Unit

## Wholesale Banking highlights

Supported 62 **green, social and sustainability bonds** and 61 **sustainable improvement loans**.

We issued the **largest green Schuldschein** to date with Porsche.

Blockchain-based trade finance platform **Contour**, co-founded by **ING Ventures**, launched into the $18 trillion global trade finance market.

We introduced the **first sustainable improvement derivative** to market.

PSD2 APIs live on the **open banking developer** portal.

We provided a **centralised digital vault** for corporate customers to store their KYC docs and **enhanced transaction monitoring tooling** for our KYC process.

(FIU), the Public Prosecution Service, Fiscal Information and Investigation Service (FIOD) and relevant ministries.

Read more on KYC in the 'Developments in risk and capital management' chapter.

## Continuing to innovate

In 2019, we continued to innovate to improve the banking experience for our customers, introducing several innovations that make banking faster and more secure for our clients.

Our cutting-edge AI tool Katana – named as an Innovator 2019 by Global Finance magazine – helps to improve decision-making in bond trading. In 4Q, Katana was spun out into an independent London-based company called Katana Labs, with backing from ING Ventures and other investors. This is in line with ING's strategy to create innovative fintech solutions and then support them in becoming independent companies.

The advanced analytics platform can aggregate vast amounts of data from multiple sources to predict the price and identify the most promising trades. The results show traders using Katana win 20 percent more trades and their prices are 20 percent sharper. At the same time, it helps investment managers to make faster, better informed, data-driven investment decisions.

We participated in the launch of instant payments in the Netherlands and Belgium by the Dutch Payments Association and the Belgian Banking Federation. Funds now get credited to the beneficiary account within five seconds, giving customers immediate access to their funds and helping them optimise cash flows. We will extend this to the rest of Europe from 2020.

Wholesale Banking clients were able to initiate and receive instant payments in Hungary as of July 2019. Instant payments are now processed within five seconds, with a maximum amount of HUF 10 million. Instant payments make it possible to make payments 24/7, 365 days a year. There is no difference between 'working days' and 'non-working days'.

In another exciting payments innovation, ING is collaborating with Dutch retailer Albert Heijn, which is piloting a fully digital supermarket. This physical store is packed with convenience-boosting and time-saving technological innovations. ING helped to develop these in our FABlab (fabrication laboratory), which focuses on cross-industry collaborative innovation. Shoppers use their bank cards to gain entry to the store. The items they select from the shelves are registered automatically. Payment, processed by ING, happens automatically when they leave.

We aim to 'wow' our customers with improvements to their service experience. In Turkey, we can now immediately identify when customers are having a problem at one of our ATMs; we call them at that moment to try and solve it. We also use our app to help customers in Turkey who are more than one kilometre away from an ING ATM by granting them the right to use other banks' ATMs free of charge.

Together with UniCredit, we invested in Axyon AI, an Italian company that helps banks offer better and faster advice to their clients by using artificial intelligence to, for example, identify investors most likely to participate in a syndicated loan.

Our open-source software 'FINN – Banking of Things' was created within ING Labs and enables smart devices to pay for their own usage, such as allowing a car to pay for the car wash. We offer this software to our business clients, who can use it to 'wow' their own customers.

In Wholesale Banking, highlights in innovation in the digitalisation space include two KYC initiatives: Domino and CoorpID. Using advanced algorithms, Domino collects and connects payments, lending and financing data to provide insights that would not normally be readily available. The platform is live in several departments and used by approximately 800 retail and WB colleagues, of which 50 serve around 20 percent of ING's Dutch corporate clients. CoorpID provides a centralised digital vault for corporate customers to store and share all their KYC documentation in a secure way. It enables clients to manage their own KYC data and easily share it with other banks, insurance companies, or auditors.

### Blockchain and distributed ledger technology (DLT)

ING is considered an industry leader in the distributed ledger technology (DLT) space. In 2019, Forbes ranked us fifth among global listed companies with high blockchain potential, recognising the pioneering work we've done in this area to improve our product offering and make banking even easier for our clients.

This includes breakthroughs in improving data privacy within distributed or shared ledgers using our open-source zero-knowledge range proof codes. Bulletproofs builds on these earlier codes, making them even faster, safer and easier to use, while our zero-knowledge proof notary service improves the privacy and security of transactions on the Corda blockchain platform. It evaluates the validity of a blockchain transaction without revealing anything about it, except that it's valid – like a notary whose job is to witness the signing of documents to validate them.

Blockchain is reinventing commodity trading, making it quicker, easier and more efficient. ING's Easy Trading Connect platform was one of the first to digitalise commodity trade financing. Building on its success, we've tested a number of successful experiments on the platform. These include Vakt, announced in 2017, which manages physical energy transactions from trade entry to final settlement and Komgo, the blockchain-based platform that transmits commodity transactions in a secure environment. In August, we successfully executed our first oil trade on Komgo, which has evolved into a venture with 15 corporates and financial institutions. The deal was executed by the Commodity Trade Finance branch in Geneva with a letter of credit issued on behalf of Mercuria Energy Trading S.A.

We also teamed up with commodity companies and financial institutions to launch Forcefield, a blockchain-based inventory management system that makes post-trade commodity transaction processing cheaper, safer, and more efficient. It manages commodities throughout their entire supply chain life cycle and reduces the risks and costs of handling physical inventory.

And we joined forces with other global banks to create a digital coin that can be used to settle international money transfers instantly. This is a new step in the development of the Utility Settlement Coin (USC) project, set up in 2015 by Swiss bank UBS to develop a blockchain-powered payment mechanism to make transactions more efficient. A digital version of existing currencies, USC will cut out intermediaries, reduce exchange-rate risks, making the payments and settlements process faster and lowering transaction costs.

In Q4, blockchain-based trade finance platform Contour, co-founded by ING Ventures, launched in Singapore into the USD 18 trillion global trade finance market. Contour was co-created by ING and seven other banks in 2018 to simplify letters of credit, reducing the amount of time needed to process them from five to 10 days to under 24 hours. The launch follows a series of live pilots in 14 countries and a global trial with more than 50 banks and corporates. Ninety-six percent of participants said Contour would accelerate their letters of credit process, improve efficiencies and reduce costs.

### MineHub: digitalising the mining and metals sector

ING teamed up with IBM and MineHub on a new blockchain platform for mining and metals, aimed at making the entire supply chain more secure, transparent and efficient. This will help our clients in the sector to lower costs, increase transparency and contribute to sustainable production and trading. The solution is being built on IBM's cloud-based blockchain platform. MineHub completed development of its platform in October 2019, and it is now live. MineHub's first release offers comprehensive functionality that enables miners to capture mineral production and digital contracts with buyers, streamlining post-trade operations (including document flow), financing and logistics.

## Open banking

We strive at all times to protect customer data and privacy in line with the new European regulations. Customers' needs and expectations are changing rapidly and companies have no option but to embrace this shift and adapt. At the same time, open banking requires banks to rethink traditional products and services, and go beyond traditional banking territory in creating new customer experiences.

We've chosen a strategic approach towards the revised Payments Services Directive (PSD2) and open banking. PSD2 is a step forward in delivering our platform strategy. It opens ING up to collaborate with third party providers who can innovate with us to offer our customers more options in how they manage their money and make payments online. We've implemented PSD2 in all 17 countries that fall under PSD2 legislation. This helps us to become a global platform bank, scalable, open and borderless, with one user experience, one API (application programming interface) solution and one developer portal to efficiently and seamlessly connect and interact with customers and partners.

Open Banking is a key enabler for new open business propositions and strategic platform strategies across all client segments. Since September 2019, all banks in Europe must implement PSD2. We have three PSD2 APIs available to external parties on our developer portal. These give customers the choice to use third-party apps to manage their money or make online payments. For business clients in the Netherlands we launched a payment request API that enables them to enhance their end-consumer experience by adding a convenient, simple payment functionality into their own app.

Partnerships are becoming more and more important to the delivery of optimal client experiences. APIs are essential for enabling digital businesses, as they are the de facto standard for integration and co-creation with our partners. With open banking, we are laying the foundation for the bank of the future. We provide the key capabilities that allow ING to open up by establishing secure, scalable, compliant and uniform connectivity with external parties via APIs.

# Our digitalisation journey

Digital banking, innovation and transformation are in our DNA. ING's aim is to be the next generation digital bank, offering a single digital platform or 'ecosystem' where customers can find solutions to all of their financial and finance-related needs.

Digitalisation guides our investments and transformation efforts. Our ambition is to offer customers everywhere the same empowering and differentiating experience. We are going about this in several ways.

In 2019, we continued to innovate to improve the digital customer experience and to strengthen our mobile-first approach. The number of mobile card transactions increased six-fold in 2019 from 2018, boosted by the integration of third-party services like Apple Pay and Google Pay. The overall share of customers who only interact with us on their mobile device increased to 37 percent in 2019 from 26 percent in 2018. The adoption of mobile payments will grow exponentially in coming years, which is expected to boost mobile even further.

We are digitalising more processes to make them convenient and time-saving for customers. For example, in 2019, with Apple Pay, we enhanced the experience of our mobile app users in the Netherlands, Germany, Romania and Spain. In Germany and Poland, we now offer features that help customers to better manage their money by notifying them of upcoming payments, similar to the 'Kijk Vooruit' feature in the Netherlands. We also made Google Pay available in Germany and Poland.

Another highlight was the launch of our mobile-only bank offering in the Philippines. ING has been operating in the Philippines for nearly 30 years, but only moved into retail banking with the official launch of our first all-digital savings product in November 2018. It is the first bank savings product that allows transactions to be conducted solely on ING's mobile app. creating an account is free. Users only have to download the ING app and make sure they meet a number of requirements, including being at least 18 years old and having one of three government-issued IDs. Since the launch, there have been around one million app installations, we have signed up more than 100,000 customers and the app scores an average 4.2 rating.

In the Netherlands and Germany, Wholesale Banking clients can now easily open an account digitally and directly from their ERP via e-Bank Account Management, using a SWIFT standard. In developing this, we enable clients to standardise the process for account openings and later mandate changes to be able to create the basis for digital lifecycle management.

In 2019, we saw increased uptake of our Virtual Cash Management solution, enabling treasurers to manage their cash position via a single master account, while keeping local accounts across Europe for local operations without the burden of managing all those accounts individually.

Our digital portal, InsideBusiness, is a key enabler of our 'digital first' philosophy in Wholesale Banking. Our main interactive channel for business clients, it offers a single point of access to a growing range of corporate banking services, online and through a mobile app. It provides all the touch points that business clients need, through a single sign-on, giving them real-time insights and a single source to manage all their financial transactions at any time, and on any device. We launched InsideBusiness in 2015 and it now has around 18,000 companies using it, with 57,000 active users, 6,000 of whom use the mobile app. Large corporates make up 32 percent of users, with the rest being mid-corporates. Our goal is to have all our corporate clients using it – and we're gradually closing in on that target.

A recent improvement was the launch of Corporate Administrator. This allows clients to decide for themselves which employees can do certain things in their account. Clients can appoint one or two of their own corporate administrators who can grant access rights. Already, around 40 percent of our corporate clients are using Corporate Administrator, which is ahead of our targets.

Another enhancement is the addition of a breakthrough feature called M-Token. This addresses the priority we place on security combined with convenience. It replaces the previous card-and-reader access, which became increasingly inconvenient for our customers. M-Token, via the InsideBusiness app, makes access a lot easier. Now, to gain access, clients can simply launch the mobile app and scan a QR code on the login page.

## New-look branches

While banking is becoming increasingly digital, our branches still have an important role to play in providing more complex, personal advice to customers.

This is driving ING to change its branches, making them even more personal, while equipping them to meet today's digital needs. The idea is to make customers feel at home. Some branches have a big table, where customers can settle down, have a cup of coffee or do some work. There are separate booths to get personal advice. There's also a kid's corner and a fully equipped 'digi-corner' for online banking or learn-how activities.

In time, all of ING's branches will adopt this new, home-like concept. Some have already opened in Turkey, Poland, Spain, Romania, Belgium, the Netherlands, Italy, Austria and Luxembourg.

## SME & Mid-Corp

The SME & Mid-Corp segment aims to empower people to manage and accelerate their business. No matter how big or small, businesses everywhere are increasingly digitalised and expect their bank to be connected and integrated into their world. They want digital solutions that are smart, personal and easy. To meet these needs and deliver an exceptional experience for these customers, we're transforming our current service model and building digital capabilities to offer compelling end-to-end digital customer journeys supported by a common infrastructure.

This includes enabling merchants in Turkey to accept payments more easily via their smartphones rather than expensive point-of-sale terminals; an online banking platform that gives businesses a single access point to all their financial products and services; and instant loans for entrepreneurs in Germany through our acquisition of fintech Lendico. In November 2019, new loan utilisation increased from €1 million to €14.4 million.

In Poland, ING's online banking platform for business customers was named by Global Finance Magazine as the world's best Integrated Corporate Banking site for 2019. It currently provides around 65,000 SME and mid-corporate clients with a single access point for all their banking products and services and handles more than 70 million transfer orders a year. In Romania, the business platform processed its first one million payments in 3Q 2019.

Also in Poland, ING is the first bank to launch its own payment gateway – imoje – that provides merchants with a unique 'buy now, pay within 21 days' payment option. Co-created with Czech fintech Twisto, 1,500 shops are now using the payment gateway and 580,000 transactions have been carried out on imoje since April 2018.

## Responsible finance

ING is committed to contributing to a low-carbon and financially healthy society, both through our own efforts and by helping our clients to be more sustainable. As a bank, we make the most impact through our financing, via the loans we provide to clients. This is why we announced in September last year that we would steer our €600 billion lending portfolio towards meeting the well-below two-degree goal of the Paris Climate Agreement. Our strategy to get there is called the Terra approach.

One year later, we published our first progress report on Terra, providing a status update on the alignment of our lending portfolio with the pathway to the goal. The report presented our climate alignment performance, targets, challenges and next steps for five of the nine sectors with the biggest influence on greenhouse gas emissions: power generation, automotive, commercial real estate, residential real estate and cement.

For the remaining four in scope, fossil fuels, shipping, aviation and steel, we provided an update on progress to date, initiatives and next steps. Quantitative results for these four sectors are expected to be disclosed in 2020.

The report's centrepiece, the Climate Alignment Dashboard (CAD), discloses quantitative results on the climate alignment of our lending portfolio. It shows the CO2e intensity per sector of our portfolio compared to the market and the relevant below two-degrees climate scenario. It also displays the climate alignment target per sector and ING's intended decarbonisation pathway per sector to converge towards the target.

While Terra is supporting our responsible finance business and will guide ING towards new opportunities to support our clients, Terra will also help us to build a more climate-resilient portfolio as it guides our strategies towards two-degree alignment. Terra, therefore, forms part of our alignment with the Taskforce for Climate-related Financial Disclosures (TCFD) recommendations.

For more, see the Non-financial appendix or Developments in risk and capital management chapter.

As each sector requires a custom approach, Terra draws upon more than one methodology for target-setting. Currently, we focus on the Paris Alignment Capital Transition Assessment (PACTA) for corporate lending, and the Science Based Targets Initiative's Sectoral Decarbonisation Approach (SBTi SDA).

PACTA was co-developed with the 2° Investing Initiative (2°ii), a global think-tank developing climate metrics in financial markets. It looks at the technology shift that's needed across certain sectors to slow global warming and then measures this against the actual technology clients are using – or plan on using in the future. The SBTi SDA sets out sector-specific decarbonisation pathways designed so as to be in line with the science-based scenarios using intensity metrics. Both methodologies use science-based scenarios developed by independent organisations like the International Energy Agency and inform us what needs to shift, by how much and by when. This is where financing comes in – and ING can have an impact.

The client data underlying the Terra approach is obtained from global databases that track public and private asset level and company data worldwide in the sectors in scope. This is easier for clients, as they are not required to provide any additional data themselves.

In December 2018, the global banks BBVA, BNP Paribas, Société Générale, and Standard Chartered joined ING in making the Katowice Commitment to align their loan portfolios with global climate goals using a similar approach. We have also personally and individually engaged with more than 40 banks interested in the work ING is doing and the positive results are visible.

Since its launch at ING's offices in London in February 2019, more than 17 systemically important banks, including ING, have joined the 2°ii PACTA pilot for banks. ING was also among the first signatories of the UNEP-FI Principles for Responsible Banking (PRB). In addition, ING co-chaired the sub-group that developed the PRB Collective Commitment on Climate Action which took ING's Katowice Commitment initiative as its foundation.

The Terra approach is complemented by the other ways we work to drive sustainable business. We have committed to reducing our thermal coal exposure to close to zero by 2025 and support our clients globally in the transition to a low-carbon society. We do this through various financial instruments, including green loans, sustainable improvement loans, bonds and advisory services.

### Sustainability expertise

Several governments recognised ING's sustainability expertise in 2019, including:

- Austria, where we were part of a government working group on green finance;
- We received a Polish government mandate to originate euro-denominated green bonds; and
- We have a recurrent mandate to help Spanish regional governments in their sustainability goals.

We were well on track in 2019. Climate finance increased 13 percent to €18.7 billion, and lending to industry ESG leaders grew slightly by 0.1 percent to €7.1 billion. Although social impact financing decreased 3 percent to €750 million due to repayments, we remain committed by lending to projects that lead to, for example, basic infrastructure improvements, community development or essential services.

In addition to lending, we supported 62 mandates for clients through green, social and sustainability bonds. ING increased its bonds business by 68 percent year-on-year to €5.6 billion, outpacing the total euro denominated bond market growth.

ING is considered one of the pioneers in sustainable finance, having introduced the first sustainability ESG-linked loan and a made-to-measure sustainability improvement loan. In 2019, ING continued to shape this sector and open up new markets by developing sustainability improvement concepts and financial products.

In 2019, we introduced the first sustainability-linked Schuldschein, together with machinery and plant manufacturer Dürr. ING jointly arranged and structured the transaction.

In the second quarter, we announced the world's first sustainability improvement derivative (SID) provided to SBM Offshore, a global company that supplies floating production units to the offshore energy industry. The SID is an interest rate swap that hedges the interest rate risk of the construction of one of SBM Offshore's floating production, storage and offloading facilities. It's the world's first derivative with a price linked to the company's sustainability performance, as well as trading risk, capital requirements and profit. The credit spread of the SID can increase or decrease based on SBM Offshore's ESG performance, as scored by Sustainalytics, an independent provider of ESG research and ratings.

In October, we launched another product aimed at encouraging companies to get measured on ESG goals. Our sustainability improvement capital call facility for Singapore-based Quadria Capital Management is the first in the world to link the interest rate of the private equity fund to the sustainability performance of its portfolios. The USD 65 million three-year revolving capital call facility is the first of its kind in the global fund finance industry, which is currently worth USD 400 billion.

We continued to deepen our market credentials with sustainable finance products that support our corporate clients in achieving better sustainability performance.

We supported 61 sustainability improvement loans, and 62 green loans and social and sustainability bonds in 2019. These include green finance frameworks and green loans for Italo, Europe's leading high-speed rail passenger operator, and Itochu, a Japanese trading company, as well as a sustainability-linked loan for Chinese-owned trading firm COFCO. ING also closed its first sustainability improvement loan in the US, structured by ING's sustainable finance Americas team.

### Financing for social impact

Sustainability is about planet and people. When it comes to people, we choose to focus on financial health, but that's not all we do. We make more impact with what we do finance than with what we don't finance. So we aim to increase our social impact finance portfolio by lending to projects that lead to, for example, basic infrastructure improvements, community development or essential services. And we're working on making a positive contribution to human rights as financier, employer, taxpayer and driver of progress and prosperity. We are a founding signatory for the United Nations' Principles for Responsible Banking, which aim to help the banking sector in making a positive contribution to society.

Alongside the growing number of green loans and bonds, there were a number of sustainability firsts in 2019. ING issued the largest green Schuldschein with Porsche for €1 billion, and the first green bond framework in the telecom sector with UK telecoms company Vodafone. The Porsche transaction is also the first of its kind by a car manufacturer, and the huge demand resulted in the original order book volume having to be increased. ING acted as the green advisor on the project. ING also issued its first-ever green covered bond. In October, ING Bank Hipoteczny in Poland launched a PLN 400 million (USD 93 million) five-year green covered bond on the back of strong investor interest.

ING was also the sole green structuring advisor for the Norwegian bank SR-Boligkreditt's €500 million first green covered bond, helping to draft a green bond framework that stipulates investments in green buildings, renewable energy and clean transportation.

Almost half of our loan book consists of mortgages. Our ambition is to make our mortgage portfolio energy-positive by 2050. This means the homes in this portfolio will collectively produce more energy than they consume.

To this end, we are developing retail products, tools and services to help homeowners make their houses more sustainable. As houses generally account for about 20 percent of $CO_2$ emissions, we believe this could have a meaningful impact in the fight against climate change. At the same time it will help our customers to lower their $CO_2$ footprint and energy bill. We have already provided green mortgages in Germany through development bank KfW. Customers can use the new products to finance solar panels, for example, or insulate their homes. In the Netherlands and Belgium, we also offer a consumer loan with a reduced interest rate to help customers pay for green refurbishments.

Besides these financial solutions, we also help to raise awareness on the topic. Consumers in the Netherlands, for example, can check the energy profile of their homes on our website, as well as the options and financing available to improve in this area. We also provide Dutch homeowners who want to invest in upgrading their energy label with a free rating as we know how insights can help people to take the first steps towards a more sustainable home.

ING offers sustainable investment (SI) services to its retail banking customers in the Netherlands, Belgium, Luxembourg and Germany. In 2019, our retail customers in these countries invested a combined € 9.3 billion using ING's SI services, up from € 6.3 billion in 2018. SI services represented seven percent of ING's total retail banking customer investments in 2019. We have the ambition to grow our SI services.

For more on sustainable investment services, see the Non-financial appendix.

To take sustainable finance further in the business we have set up regional sustainable finance teams in the Americas and Asia to support our clients in these regions.

Our efforts in this area are being recognised. In 2019, we were ranked as 'climate action leader' by the leading global environmental disclosure platform CDP for the fifth year.

## Financial health

As a result of our financial empowerment activities, 25.9 million people (67 percent of our customer base) felt financially empowered in 2019 ☒. In 2018, this was 25 million or 65 percent. Our ambition for 2022 is for 32 million customers to feel financially empowered by ING.

### Information

We believe that the right information at the right time can help people make better financial decisions. For example:

- In the Netherlands the **'Kijk Vooruit'** forecasting tool gives customers an overview of their planned and predicted transactions, allowing them to gain more control over their finances.
- Also in the Netherlands, we launched the **'Digitaal vooruit'** initiative where Digicoaches are available in pop-up stores at several locations to answer any digital questions people may have.
- In Austria and Romania, we offer customers access to **EmpowerCamp** – a five-week programme to help customers understand their financial profile and take steps to improve their finances.
- In Poland, our **YouTube videos** providing people with financial insights have had over 100 million views.

### Innovation

Products and services are similar across banks. We differentiate ourselves by going a step further and innovating to create tools that help customers make better financial decisions. For example:

- In the Netherlands, we introduced our new **voice-activated ATMs** in branches of Albert Heijn and at Schiphol Airport. The speech function on the cash machines makes it easier for people who have difficulty reading or who are visually impaired to withdraw money themselves.

- In Australia, Everyday Roundup makes saving money and paying off your home loan easier and more convenient for customers in Australia. ING customers saved AUD 81 million via 70 million transactions by having ERU enabled on almost 300.000 accounts. The average saving was AUD 1.16 per transaction and AUD 284.41 per account in 2019.
- In Spain and France, our digital investment advisors **My Money Coach** and **Coach Epargne** continued to offer customers precise and intelligent investment solutions.
- We also partnered with others to accelerate innovation like **Minna**, which helps people keep track of and manage their subscriptions.

## Involvement

Our involvement in both the communities we operate in and in developing countries also contributes to financial health. For example:

- Globally, we continued our Power for Youth partnership with UNICEF to empower adolescents with financial, entrepreneurial, and civic leadership skills. Since 2015 the partnership has directly empowered more than 500,000 adolescents, benefiting more than 11 million indirectly.
- Also globally, hundreds of ING colleagues took part in **Global Money Week**, volunteering in classrooms across the Netherlands, Spain, Czech Republic, Luxembourg, Philippines, and Turkey to teach young people about money management.
- In the Netherlands we support the **Youth Perspective Fund**, which helps young people aged 18 to 27 to manage their debts. The initiative supports around 150 youngsters a year.
- Also in the Netherlands we're a founding partner in the debt-prevention programme **Nederlandse Schuldhulproute**, along with several other banks and the Dutch Banking Association. This unique public-private collaboration aims to prevent and solve problematic debt.
- Lastly in the Netherlands, we offered more than 250,000 lessons on **digital skills for students** in collaboration with organisations such as Bomberbot and DesignWeek@School.
- In Romania, we supported **Banometru** to help adults with financial difficulties to access financial planning and counselling.

### Think Forward Initiative

The Think Forward Initiative (TFI) supports research and innovation that empowers people to make better financial decisions. This is based on the belief that society is better off when people make sound financial decisions. The TFI Research Hub works to gain a deeper understanding of the behaviours behind financial decision-making, while the TFI Accelerator Hub translates these insights into innovation. The Community Hub promotes these activities through the TFI community and network.

In 2019, eight start-ups were selected for the Accelerator Hub's six-month Growth Track programme, which is designed to help them scale fast. These include:
**Monkee**, an app that motivates people to save by setting defined goals and weekly targets.
**Salary Finance,** which partners with employers to offer their staff salary-linked financial well-being benefits that help them save regularly and avoid expensive debt.
**Tully**, which helps people to build a budget online so they can understand exactly what their financial situation is and work out a plan to make the most of their money.

During the year, the Research Hub published several academic research reports on topics such as 'how to stimulate debtors to pay up', 'how family members manage household money' and 'the benefits of joint and separate financial management of couples'.

TFI is a joint initiative with Deloitte, Dell Technologies, Amazon Web Services, IBM and the Centre for Economic Policy Research. Through its various channels and initiatives, it successfully connected with consumers on 15 million occasions in 13 countries in 2019. Its vision is to ultimately empower 100 million people to make better financial decisions.

# Performance in 2019

## Retail Banking

Retail Banking showed good commercial performance, despite continued pressure from the low interest environment. However, net profit declined 7.8 percent to €3,347 million from €3,630 million in 2018. This was mainly caused by higher risk costs and higher expenses (largely caused by KYC-related expenses and increased regulatory costs), whereas income increased marginally. No special items were excluded from the underlying results in both years, and Retail Banking's net result is therefore equal to its underlying net result.

The underlying result before tax decreased 6.4 percent to €4,744 million in 2019, due mainly to higher expenses and increased risk costs. Underlying income was 0.3 percent higher, driven by higher income in most of the Retail Challengers & Growth Markets (supported by strong commercial growth and an increased retail customer base) and Retail Belgium.

These increases were largely offset by a decline in Retail Netherlands, due mainly to lower net interest income on savings and current accounts. Total customer lending increased by €17.4 billion to €437.1 billion compared with year-end 2018. Adjusted for currency impacts, Treasury and the WestlandUtrecht Bank (WUB) run-off portfolio, Retail's net core lending book grew by €16.1 billion. Net customer deposits (also excluding Treasury and currency impacts) grew by €20.2 billion in 2019.

Underlying operating expenses rose 3.2 percent compared with 2018. The increase was mainly due to higher KYC-related costs, increased regulatory expenses, higher salaries and continued investments in business growth, partly offset by cost savings. The underlying cost/income ratio was 57.1 percent in 2019, compared with 55.5 percent in 2018.

Risk costs rose to €588 million, or 14 basis points of average customer lending, from €447 million, or 11 basis points, in 2018. Risk costs increased primarily in Retail Netherlands after net releases in 2018, but are still relatively low. Retail Germany continued to record a net release.

### Market Leaders

#### Retail Netherlands

The underlying result before tax of Retail Netherlands decreased 14.2 percent to €2,204 million from €2,568 million in 2018. This was mainly due to lower income, mainly reflecting lower margins on customer deposits and lower revenues from Treasury, combined with higher risk costs. Operating expenses declined slightly.

Underlying income fell 5.1 percent to €4,505 million from €4,747 million previous year. The interest result was 5.5 percent lower, reflecting margin pressure on savings and current accounts due to lower reinvestment yields and lower revenues from Treasury. This was partly compensated by improved margins on mortgages. Net core lending (excluding the WUB run-off portfolio and Treasury-related products) grew by €2.0 billion in 2019, equally divided over mortgages and other lending. Net growth in customer deposits (excluding Treasury) was €8.4 billion in 2019. Net fee and commission income rose by €10 million, or 1.5 percent, primarily due to higher daily banking fees. Investment and other income declined by €45 million, mainly attributable to lower results from financial markets-related products.

Underlying operating expenses declined 0.5 percent on 2018. This was mainly due to lower regulatory costs, benefits from the ongoing cost-saving initiatives and some positive one-offs, partly offset by increased salaries as well as higher KYC and IT-related expenses.

Risk costs in 2019 increased to a relatively low €91 million, or 6 basis points of average customer lending, partly caused by a change in the house price index that is used for Dutch mortgages. This compares with a net release of €41 million 2018, which included releases in both mortgages and business lending.

### Retail Belgium

Retail Belgium includes ING in Luxembourg.

The underlying result before tax of Retail Belgium rose 8.7 percent to €647 million in 2019, compared with €595 million in 2018. The increase reflects higher income and stable expenses, only partly offset by an increase in risk costs.

Underlying income increased to €2,442 million from €2,369 million in 2018. The interest result was 4.2 percent up to €1,907 million, mainly due to volume growth, increased margins on mortgages, and supported by higher net interest income from Treasury-related products. This was in part offset by lower net interest income from savings and current accounts, reflecting the low interest rate environment, and some margin pressure on non-mortgage lending. The net growth in customer lending (excluding Treasury) was €3.3 billion, of which €1.2 billion was in residential mortgages and €2.1 billion in other lending. The net inflow in customer deposits (excluding Treasury) was €4.1 billion in 2019. Net fee and commission income increased 0.8 percent to €374 million. Investment and other income was €8 million lower, mainly due to lower Treasury-related revenues.

Operating expenses declined 0.1 percent to €1,609 million, mainly due to lower staff-related expenses stemming from the transformation programmes, partly offset by higher regulatory costs and KYC-related expenses.

Risk costs increased by €22 million to € 186 million, or 21 basis points of average customer lending, from €164 million, or 19 basis points, in 2018. The increase was mainly caused by additional provisioning on individual mid-corporates files and higher collective provisions for consumer lending.

## Challengers & Growth markets

### Retail Germany

Retail Germany includes ING in Austria.

The underlying result before tax declined 1.5 percent to €957 million, compared with €972 million in 2018, mainly due to higher expenses, partly offset by slightly increased income and a higher net release in risk costs.

Underlying income increased 0.7 percent to €1,985 million in 2019 from €1,972 million a year ago. Net interest income declined 5.5 percent, mainly due to lower Treasury-related interest results (with a partial offset in other income). Excluding Treasury, net interest income rose marginally, mainly reflecting volume growth in most products and improved margins on mortgages, offset by lower interest results on savings and deposits due to margin pressure. The net growth in core lending (excluding Treasury) was €3.0 billion in 2019, of which €2.4 billion was in mortgages and €0.6 billion in consumer lending. Net inflow in customer deposits (excluding Treasury) was €0.8 billion. Net fee and commission income rose 19.1 percent to €268 million, due to higher fees on mortgages and daily banking. Investment and other income rose by €62 million to €138 million, largely due to the aforementioned accounting asymmetry in Treasury revenues.

Operating expenses rose 5.2 percent to €1,080 million from €1,027 million in 2018. The increase was mainly due to a restructuring provision related to the completion of ING's agile transformation in Germany, higher KYC-related expenses, investments to accelerate the acquisition of primary customers, and the launch of Interhyp in Austria.

Risk costs were €-53 million, or -6 basis points of average customer lending, compared with €-27 million in 2018. The net release in 2019 mainly related to model updates for mortgages, while the net release in 2018 included a significant release in the consumer lending portfolio.

### Retail Other

Retail Other consists of the Other Challengers & Growth Markets, including the bank stakes in Asia.

Retail Other's underlying result before tax increased 0.3 percent to €935 million in 2019, from €932 million in 2018. This was mainly due to higher income, partly offset by increased expenses and higher risk costs.

Total underlying income rose by €194 million, or 5.9 percent, to €3,509 million. This increase was driven by strong results across most of the countries, whereas 2018 included a higher profit from ING Bank's stake in TMB due to one-offs. Net interest income rose 3.6 percent to €2,787 million, reflecting volume growth in lending and customer deposits, and a stable total interest margin. This increase was offset by accounting asymmetry in Treasury with an offset in other income. The net production in customer lending (excluding currency effects and Treasury) was €7.8 billion, with increases mainly in Spain, Poland and Australia, while Turkey and Italy declined. Net customer deposits grew by €6.9 billion in 2019, with the largest increases in Poland, Spain and Australia. Net commission and fee income increased 7.1 percent to €423 million driven by increases in most countries, but declined in Spain and Turkey. Investment and other income rose by €68 million, mainly due to the aforementioned accounting asymmetry in Treasury and a higher dividend from Bank of Beijing, partly offset by a lower profit from TMB.

Operating expenses increased by €177 million, or 8.7 percent, to €2,210 million. This increase was in addition to higher regulatory costs and legal provisions, mainly due to higher expenses to support business growth and the implementation of bank-wide regulatory programmes, including KYC.

Risk costs were €364 million, or 38 basis points of average customer lending, compared with €350 million, or 40 basis points, in 2018. The increase was mainly attributable to higher risk costs in Spain and Poland, while risk costs in Turkey and Italy declined.

## Wholesale Banking

The full-year 2019 results for Wholesale Banking show that conditions were challenging in our markets. The net result declined to €1,352 million from €1,877 million in 2018. There were no special items excluded from the underlying results in both years. The underlying result before tax dropped 27.6 percent to €1,830 million, down from €2,529 million in 2018. The decline reflects elevated risk costs (compared with a relatively low level a year ago), lower revenues mainly in Financial Markets and Lending, as well as higher expenses.

Lending posted an underlying result before tax of €1,597 million, down 20.4 percent compared with 2018. The decline reflects lower income combined with higher expenses (including increased regulatory costs and KYC-related expenses) and higher risk costs due to a number of large individual files. Despite higher average volumes, Lending income declined, mainly due to some pressure on margins and the €66 million gain related to an equity-linked bond in Belgium recorded in 2018. The underlying result before tax from Daily Banking & Trade Finance declined 24.3 percent to €476 million from €629 million in 2018. A modest increase in income, reflecting improved margins at lower average volumes, could not compensate for higher expenses and elevated risk costs. The increased expenses reflect higher regulatory costs and KYC-related expenses as well as investments in Payvision and regulatory changes (including PSD2). Risk costs in 2019 included a sizeable provision for a suspected external fraud case.

Financial Markets recorded an underlying result before tax of €-121 million, compared with €-36 million in 2018. The drop was predominantly due to lower income, which was impacted by €228 million of negative valuation adjustments versus €-1 million in 2018, in part offset by lower expenses on the back of ongoing cost-efficiency measures. Excluding valuation adjustments, pre-tax result rose by €142 million compared with 2018, driven by higher client income. The underlying result before tax of Treasury & Other was €-123 million compared with €-70 million in 2018. This decline was mainly due to lower results from Treasury-related activities and Corporate Investments, whereas the result of the run-off businesses improved after the €123 million loss on the intended sale of an Italian lease run-off portfolio recorded in 2018. Expenses increased mainly due to investments in KYC enhancement and innovation, while 2018 included a release from a legal provision.

Total underlying income of Wholesale Banking fell 3.8 percent to €5,298 million compared with 2018, mainly reflecting lower revenues in Financial Markets, Lending and Treasury-related revenues, while 2018 included the aforementioned loss on the intended sale of an Italian lease run-off portfolio. In 2019, the net core lending book (adjusted for currency impacts and excluding Treasury and the lease run-off portfolio) grew by €1.1 billion. The inflow in net customer deposits (excluding currency impacts and Treasury) was €3.1 billion. Net interest income increased 2.9 percent, mainly driven by volume growth in Lending at lower margins and higher interest results in Daily Banking & Trade Finance, especially in Bank Mendes Gans and Payments & Cash Management. Net fee and commission income declined 1.5 percent. Investment and other income fell by €304 million, mainly due to lower valuation results in Financial Markets, while previous year included a gain on a bond transaction in Belgium and a loss on the intended sale of an Italian lease run-off portfolio.

Underlying operating expenses rose 6.0 percent to €2,937 million, in part due to higher regulatory costs. Excluding regulatory costs, expenses rose 4.7 percent, mainly attributable to higher KYC, IT and staff-related expenses, partly offset by continued cost-efficiency savings. The underlying cost/income ratio increased to 55.4 percent, from 50.3 percent in 2017.

Risk costs increased to €532 million, or 29 basis points of average customer lending, from a relatively low €210 million, or 12 basis points of average customer lending, in previous year. The increase was mainly attributable to a number of large individual files, including a sizeable provision for a suspected external fraud case.

## “Many customers still prefer personal contact when it comes to making important financial decisions”

“Banking is becoming more and more digital, but many customers still prefer personal contact when it comes to making important financial decisions,” says Barbara Vanhauter, global lead human channels and digital assistance.
“That’s why we’ve introduced a new concept that’s all about making customers feel at home and providing them with a refreshing and warm experience when they enter a branch. We’ve created spaces where people can get personal advice and we’ve changed the waiting area into a welcoming place where you can get a good cup of coffee.
“Digital is at the core of our branches, so we’ve fully equipped them to meet today’s digital needs. This is the way we want to differentiate ourselves: a digital bank with a great human touch. I’m proud that we’ve introduced the concept in seven countries, giving them the same look, feel and service model. All of ING's branches will adopt this new, home-style concept. In the future, we need to focus on how a physical space can benefit customers, considering that we’re moving into a platform business that brings services together in one place. Convenience is the one thing customers will be looking for, and by offering this both digitally and physically, we can stay ahead of the game.”

"Our actions must be driven by customers' feedback, so we can offer them the smoothest journey possible"

ING's first global customer experience day (CX Day) was inspired by the theme 'small changes, big impact' and saw retail teams across the globe come up with the best ideas to make the customer experience more personal, easy and smart. "In Luxembourg, we tackled 13 topics," says Caroline Vappiani, Customer Experience specialist, ING Luxembourg. "We came up with a number of solutions: for the 'easy' principle, we added a cancellation link for the online appointments; for the 'personal' principle, we added a dynamic greeting message in My ING, tailored to the time of day, and for the 'smart', we developed a visual overview of incoming and outgoing funds in My ING. Also, a milestone achievement was being able to fix a bug in My ING's secure messaging system that caused problems when people used some fairly common special characters, like apostrophes or percentages. Sounds like a small detail, but our customers had to replace or delete each special character in their message before they could send it, which was really tedious. It took nine hours of coding, but we fixed the problem on CX Day. To identify improvements such as these, it's vital that we listen to our customers and respond to their needs. Our actions must be driven by their feedback so we can offer them the smoothest customer journey possible."

# Our people

People are at the heart of our business strategy. In an industry that's changing fast, ING's workforce is evolving to keep pace with the skills and capabilities needed to embrace a digital future. To attract and retain talent we strive to offer our employees a differentiating experience and an inspiring workplace that encourages collaboration, innovation and personal growth.

Enhancing our digital competencies is essential to deliver on our Think Forward strategy. At the same time, traditional banking capabilities remain important. What counts is motivated people – our employees – who go the extra mile to make a difference.

## Orange Code

ING's business centres on people and trust. People trust us with their money and with their data. Maintaining this trust is crucial. We have a responsibility to protect our customers, society and our bank from financial or other crimes that could harm them or the financial system as a whole.

Everything we do at ING is guided by the values and behaviours that underpin our way of working. We call this our Orange Code, which puts integrity above all.

It is our policy not to ignore, tolerate or excuse any behaviour that is not in line with our Orange Code values. Doing so could potentially put our customers at risk, erode the public's confidence and damage our reputation. That's why integrity is at the very foundation of our culture.

**Orange Code**

**with integrity above all**

### Our values

The ING values are the non-negotiable promises we make to the world and the principles we stick to no matter what.

We are honest

We are prudent

We are responsible

### Our behaviours

These behaviours are the commitments we make to each other and the standards by which we measure each other's performance.

Take it on and make it happen

Help others to be successful

Always be a step ahead

Each and every one of ING's more than 56,000 employees has a responsibility to live up to the Orange Code. We assess them against the Orange Code behaviours as part of the performance management process. All new joiners are introduced to the Orange Code through an e-learning module that explains ING's culture, way of working and what we expect from our employees. There is also a global dilemma model to help employees recognise dilemmas and make balanced decisions in line with the Orange Code values and behaviours. This also applies to decisions and dilemmas arising from the increasing use of data in our business and we have local and global Data Ethics Councils to help us align these with the Orange Code.

## Business ethics and risk culture

We expect every ING employee to ensure we are a bank people can trust and that we can be proud of. This starts at the top. Leaders should create the right conditions for our employees to safeguard the bank and society from financial economic crime. The Behavioural Risk Management team takes on common behavioural themes with partners such as HR, Audit, Compliance and the business units to ensure alignment across the organisation and to embed the desired leadership and risk behaviours (speak up, psychological safety, communication, guiding leadership).

See the 'Risk management' section for more about behavioural risk.

We introduced a new global learning model in 2019 that aims to professionalise Compliance, KYC (the process to know our customers and verify their integrity) and Risk training and tailor it to our specific business needs. We further embedded the Orange Code dilemma model in existing decision-making processes and trained experts to support the organisation to put it into practice. In addition, new employees undergo a series of e-learnings on topics such as money laundering, compliance, dealing with dilemmas, data risk and integrity in practice. We also rolled out a new e-learning module to all employees on data protection in 1Q 2020.

We encourage people to speak up when they encounter unacceptable behaviour in the workplace, also anonymously. Read more about our Whistleblower policy on our corporate website.

In 2019, we created a global code of conduct that builds on the Orange Code and gives employees worldwide concrete examples of how to put the ING values into practice. It was introduced in the first quarter of 2020. This is in addition to the local codes of conduct in place in various countries. In the Netherlands, all our employees are also required to take the Banker's Oath, committing to maintaining high standards of ethical behaviour. On 31 December 2019, 98 percent of Dutch-based employees were covered by the oath.

## Performance management

At ING we manage our people's performance on a continuous basis. Called Step Up, our global performance management practice includes 'continuous conversations' between employees and their managers with an emphasis on fewer, more challenging 'stretch ambitions' that encourage them to perform at their best. It also assesses employees against the Orange Code behaviours.

The majority of employees were assessed in this way in 2019, with the full roll-out of Step Up expected to be completed in 2020. To further tailor performance management to employees' personal purpose and their career goals, we plan to introduce individual development plans on a global level starting in 2020.

### Continuous listening

To make sure our employees are equipped to do their best to help ING achieve its ambitions and have the opportunity to share their views, we strive to create a continuous dialogue with our people using an innovative approach called continuous listening, with specific measurements linked to business performance.

Our continuous listening approach currently comprises quarterly 'pulse' surveys among smaller employee groups (around 13,000 invited) and a more detailed all-employee survey in the second half of each year. These larger surveys alternate between employee engagement one year (Winning Performance Culture) and organisational health the next. In this way we aim to identify and address issues faster, monitor employee engagement and enhance performance.

The Organisation Health Index (OHI) survey carried out in 2019 showed room for improvement. The overall health score is a performance indicator measuring organisational health relative to a global benchmark of 1,900 companies. Although we continue to outperform our peers in most areas, we saw a decline in the 2019 results. Just over half of employees (51 percent) completed the survey.

Among the findings was an improved showing in leadership practices, with increased focus on supportive, challenging and consultative leadership. Employees indicated that managers encourage honesty, transparency and open dialogue. However, they felt less involved in ING's direction and we made less progress than we hoped for in operational rigour. While innovation and managing external relationships are still core organisational strengths, we did not score as well in these areas as in previous years.

These outcomes are a clear message from employees that the Management Board takes very seriously. Action plans are being developed in the business lines and on a local level and will be monitored throughout the coming year.

### Developing leadership

ING's Think Forward Leadership Programme (TFLP) aims to develop greater leaders and better managers who can engage staff and enhance team performance. Introduced for senior leaders in 2017, it was extended later that year to people managers globally as the TFL Experience (TFLE), a four-day programme with follow-up learning activities. The first phase of the programmes focused on self-awareness, collaboration and personal ownership. Phase 2, launched for TFLP in 2018, focused on high sustainable performance, talent management and performance transparency. It will be extended to the TFLE in 2020. A total of 4,100 leaders and managers have so far participated in TFLP and TFLE. This includes almost all top-level management and around 80 percent of people managers.

ING's International Talent Programme selects and develops graduates with high growth potential. Trainees follow one of eight tracks in areas such as Retail Banking, Wholesale Banking, IT, Analytics and Risk Management as part of ING's long-term talent development strategy.

### Training

ING is committed to training its people to ensure they have the capabilities to stay a step ahead. In 2019, we spent €64 million to help employees become the best they can be. Employees are responsible for taking the lead in their own development and we expect them to continually update their skills. To facilitate this, we provide a wide range of local and global training programmes to help them develop professionally and personally.

In line with our digital ambitions, we are piloting a learning platform where our people continuously upgrade their skills and learn new ones in a virtual environment. The objective is to make learning more accessible and to share the knowledge that already exists in our organisation by enabling specialist colleagues to recommend learning and development solutions to others. Through technology and digitalisation we can bring standardisation and greater efficiency and better target our learning to develop key skills and capabilities. It's all part of our switch from traditional classroom trainings that take place a few times during the year to continuous on-the-job learning.

## Digitalisation and the changing organisation

Like all companies, we need to plan our resources carefully to meet our future needs. One of the challenges ING faces is finding, attracting and retaining people with the skills required to build a digital, data-driven bank. A large proportion (more than half) of vacancies at ING are currently related to data analytics or technology skills, and this is expected to grow in the coming years. However, these skills are highly sought after and competition for this talent is fierce. Similarly, there is increasing demand within the financial sector for people with competencies to strengthen compliance with regulatory demands, particularly in areas such as Risk and Compliance.

## People capabilities

To deliver on our purpose and strategy we need to have the right capabilities in place. Working with the business and ING's leadership, we developed a comprehensive workforce strategy that identifies the capabilities we need now and in the future. These six capabilities are grouped into 'distinctive' capabilities – those we need to create value in the organisation – and 'foundational' capabilities – needed to protect value within the organisation.

Our distinctive capabilities are data fluency, customer experience management and leadership. The foundational capabilities are non-financial risk management, operations management and cybersecurity risk management. The workforce strategy details how we deploy and develop these capabilities through training, knowledge building and recruitment to ensure we're best positioned from a people perspective to deliver on our goals.

To help us recruit new talent we continued to make improvements to our careers site in 2019. Among other things, we further facilitated targeted cross-border sourcing via the global site to find suitable candidates for more difficult-to-fill profiles. In October, we joined the 'Kickstart AI' initiative with four other Dutch multinationals, which is aimed at attracting highly skilled artificial intelligence professionals to the Netherlands.

## Changing organisation

At the same time, ING is continuously looking for ways to improve operational processes. This could mean digitalising or automating processes, restructuring activities to meet our business requirements, transferring certain activities to shared services centres, or outsourcing others to third parties. In some instances this could lead to certain jobs changing, relocating or becoming redundant. These decisions are made with care and consideration and with a full risk-assessment process.

When employees are impacted by the changes, we are committed to treating them with respect and care. We aim to help them develop their skills to find new job opportunities inside and outside ING. To facilitate this we have a variety of local schemes in place, such as a comprehensive social plan and mobility centre in the Netherlands.

## Evolving workplace

To improve the way HR serves the business we are developing our people analytics capabilities to deliver people services that are more data-driven and objective. We use data to boost business performance and monitor employee-related risk, such as engagement. There is an existing focus on creating a differentiating employee experience, building management capability and innovation. Naturally, our employees expect us to keep their data safe and comply with data privacy rules (GDPR). ING's employee privacy statement, which was introduced in 2018, empowers our people to take control of their own data. To further enhance employee awareness of data protection we rolled out a global e-learning module in 1Q 2020.

In 2019, we unveiled a new design for our office spaces to encourage collaboration, flexibility and teamwork, in line with ING's one Way of Working. Our new building in Amsterdam, which opened in December 2019, fully embraces the principles of openness, transparency, collaboration and innovation: exactly what ING stands for. It sets the standard for the type of workplace we want for our employees. In addition, there is space for businesses, academics and innovators to collaborate on solutions for the future. This is part of a new innovation district we are jointly developing with the Amsterdam municipality and two academic institutions aimed at attracting talent to the area.

## Wellbeing in the workplace

If not managed correctly, stress at work can lead to illness, absence and potentially a loss of income. Reasons for feeling stressed at work can include pressure to deliver from colleagues or managers, a heavy workload or long hours. To mitigate this risk, ING has measures in place to promote a healthy work culture and help employees to manage stress.

Support is tailored to local needs. Examples include:

- The Wellbeing Quotient (WQ) programme in the Netherlands. This is specifically designed for teams to motivate and support each other in becoming fitter, healthier versions of themselves – and have fun together while doing so. The programme focuses on improving employees' physical and mental wellbeing. It comprises modules based on energy, recovery, eating, exercise, sleep, relaxation and an action plan. All participants receive an activity tracker to help monitor progress.
- The Coach & Care programme in Belgium includes a number of initiatives to help staff maintain their positive energy and to provide support. This includes training on energy and stress prevention, relaxation rooms and an employee assistance programme offering individual coaching to employees and their family members who encounter difficulties in their personal or professional lives.
- In Germany, 'Leading WellbeING' trains leaders to support and enhance wellbeing in their teams. We also offer half-day training for employee health dialogues and half-day health check-ups, as well as a health budget they can use for their own preventative health activities. Employees also have access to resilience coaches, resilience workshops, sports and nutrition coaches, flu-jabs and sports groups in all locations (organised by employees themselves and sponsored by ING). In 2019, ING in Germany was awarded a Corporate Health Award in recognition of its initiatives.
- In Poland, ING provides fruit for employees to stimulate healthy eating, opened an on-site gym and started a cancer prevention programme in 2019.
- Various locations run relaxation and yoga classes and offer help for employees to stop smoking.

ING tracks absenteeism at a local level to ensure we comply with local laws in the countries where we operate. To get a global picture we bring the aggregated results together manually in the overview in the non-financial appendix. Data analysis can help us understand the work-related causes of employee absenteeism by identifying trends and patterns at a local and team level. We also look at the links to stress and ways to alleviate this. For example, we promote flexible working to help employees better manage their work-life balance, have company councellors available in many of our locations and provide reintegration support for colleagues returning to work after an extended absence.

## Diversity and inclusion

As our business grows, we are serving increasingly diverse customers. To understand their needs and give them an unbeatable experience we need a workforce as diverse as they are. Studies show that teams with a healthy mix of contrasting perspectives are more creative, more inventive and adapt faster. At the same time, people perform better when they feel free to be themselves. Inclusion is written in our Orange Code, which encourages us to help others to be successful.

ING's diversity manifesto, 'Success through difference', applies to all employees worldwide. It explains what diversity means to ING, why it is important, and what employees can do to promote diversity. There are more than 20 employee networks globally that bring together like-minded people within ING who want to advance our diversity and inclusion efforts in areas such as cultural diversity, for LGBT employees, for women and for employees with a disability.

To showcase the diversity of people within ING and help everyone to feel included, whatever their background, culture, experience, religion or sexual orientation, we ran a global diversity and inclusion week in June 2019. All employees globally were invited to get involved in more than 150 activities across ING.

We continued to work with the countries and business lines to refine and implement their plans to work towards the 70 percent principle, which gives managers a basis for building mixed teams around appropriate dimensions of diversity. It strives for a 30 percent difference in team make-up. Managers choose their focus while keeping in mind our global priorities – gender, nationality and age group. Work in 2019 included deep-diving into diversity dimensions ING-wide and setting up and maintaining dashboards to help different areas of the business to monitor their progress.

Like many other financial organisations, getting the right mix of people remains a challenge in parts of the business and there is more to be done to redress imbalances that still exist. ING is committed to making progress in this area. We promote equal remuneration for male and female employees for work of equal value and we have policies in place that aim to safeguard against discrimination.

With regards to gender, in 2019, women in leadership positions remained stable at 37 percent of managers (38 percent in 2018) and 29 percent of managers of managers (30 percent in 2018). Looking at succession, 41 percent of the high-potential graduates that joined the 2019 International Talent Programme are female.

For the Supervisory Board and Management Board there is a 30 percent gender target set by the Dutch government. The Supervisory Board met this in 2019. Three of its nine members (33 percent) are now female. However, the Management Board is not there yet. Nevertheless, in 2019, we announced the appointment of Pinar Abay to the Management Board with effect from 1 January 2020. This will take the number of women on the Management Board to two of its seven members. When looking at board composition we look at diversity in a broad sense, striving for factors such as nationality, gender, age, education and work background. We have a Diversity & Competence matrix, which provides a clear overview of the aspects of diversity in our Management Board. See the 'Corporate governance' section for more information.

Initiatives to improve diversity at ING include:
- appointing dedicated diversity and inclusion ambassadors in the countries and business units
- more diversity in succession planning
- improving the leadership appointment process.

As part of our commitment to a diverse and inclusive organisation, ING is a signatory to the United Nations' Global Compact Women Empowerment Principles and we support the UN Standards for Combatting LGBTI Discrimination in the Workplace. These standards guide our approach and are a source of learning for our own practices to combat discrimination and promote diversity and inclusion.

Recognising our efforts and commitment to gender equality, Bloomberg included ING in its 2019 Gender-Equality Index (GEI).

ING was a finalist for a Workplace Pride Gala Award for best media representation. We are a founding partner of the International Platform for Lesbian, Gay, Bisexual And Transgender (LGBT) Inclusion at work. Its activities include the International Workplace Pride Global Benchmark, which scores companies in seven areas and identifies best practices. In 2019, ING significantly improved its score in the benchmark, placing us in the top tier and earning us recognition as Workplace Pride Ambassador.

### Contributing to a more sustainable world

Colleagues across ING are encouraged to take a proactive role in creating a more sustainable world. This includes a learning module to familiarise new starters with our activities and help them understand their own sustainability profile. More than 7,000 colleagues completed this module in 2019. In addition, colleagues around the world took part in social impact days, investing time with ING community partners. We now have a growing network of sustainability ambassadors in more than 11 countries and plans to expand.

## External recognition

ING is recognised worldwide as a top employer, also among IT professionals. Our achievements in 2019 include:
- Certified by the Top Employers Insitute in Belgium, France, Italy, Luxembourg and Poland.
- Recognised by 'Great Place to Work' in Germany, Austria and Turkey.
- Ranked by IT professionals as one of the top three favourite IT employers in the 2019 Dutch IT Labour Market Monitor.
- Named by recruitment platform Intermediar as the top financial employer (and number three across all industries) among highly educated professionals.

## “It’s hard to create products and services for customers if we don’t reflect those customers internally”

“The Maggie programme aims to create one customer interaction platform serving over seven million customers in four countries. By its very nature it’s multinational and multicultural,” says Ana de Melo e Faro, Human Resources business partner for Maggie. “From the start we focused on building a diverse team with local know-how and expertise from the countries where it will be implemented. There are currently almost 250 people with more than 20 nationalities working on Maggie. Their average age is 37, and just under half (47 percent) are women. Although we are based in Spain, we communicate in English. Of course there are cultural differences, but we recognise the value of having so much diversity in the team. It’s hard to create relevant products and services for customers if internally we don’t reflect those customers. When you have people in the team who understand local needs, local sensitivities and local laws, you can be sure you are offering local customers what they want. At the same time, you’re giving them more choice from a bigger set of products and services from all the countries. To build the bank of the future, you also need to have the expertise of people who’ve worked in other transformation programmes, and people who have the skills to design and develop a scalable platform that offers a superior customer experience, optimises efficiencies and sets the operational standard. Maggie is a journey, also in terms of how we value our differences and work as one unit to achieve the same goal. Our Czech customers were the first to benefit from Maggie. In 2020, we will continue to use our team’s diversity to also give customers in France, Italy and Spain the same common customer experience and create one go-to platform for all their financial needs.”

# Developments in risk and capital management

Digitalisation is making it easier for customers to manage their money, offering more convenience, financial insights and empowerment. But it also brings increased risks, such as data breaches or IT failures. Improving the way we manage such non-financial risks is integral to our digital ambitions and to protecting our customers, society and our bank against financial economic crime.

Managing risk is at the core of ING's business. Financial risks include credit risk, for example when we offer loans, market risk through our trading and banking book positions, and liquidity or funding risk through financial management.

Non-financial risks are those associated with IT and cybersecurity, our daily operations (e.g. fraud and money laundering), compliance, adhering to socially-acceptable ethical norms and reputational issues.

We continually develop our risk and capital management to address political and economic developments, evolving regulatory requirements, changing customer expectations, emerging competitors and new technologies, all of which could potentially impact our business.

Some of these developments are highlighted in this chapter, particularly non-financial risks related to the rapid digitalisation of banking and financial economic crime.

On the financial risk side, in 2019 our credit risk costs increased, but remained below our through-the-cycle average. During the year, supervisory model impact (largely related to the European Central Bank's review of internal models, or TRIM) had an effect on our credit capital requirements. Interest rates in the eurozone declined further to low and negative levels. These low interest rates led to margin pressure on replication income in connection with customer deposits. Financial risk developments are extensively covered in the Risk management section.

## Capital management

Risk and capital management remain central to the entrepreneurship of the bank. Maintaining our risk profile within our risk appetite and strengthening our capital base is how we grow a sustainable business and achieve our strategic objectives. Our overall approach to capital management is to ensure we have enough capital to cover our (economic) risks at all levels and comply with local and global regulations, while delivering a return for our shareholders and investing in innovation.

In 2019, our capital position remained strong, despite higher capital requirements and additional risk-weighted asset growth from model impacts. ING's CET1 ratio was 14.6% at the end of 2019, which was well above our CET1 ratio ambition of around 13.5%. The CET1 ratio at the end of the year improved as risk-weighted assets increased due to volume growth and model impacts, effects that were offset by profit retention and positive risk migration.

In 2019, we issued €2.4 billion and redeemed €0.9 billion additional Tier 1 instruments. Furthermore, a total of €1.0 billion of Tier 2 bonds were issued whereas no Tier 2 instruments were redeemed in 2019. In addition to these instruments, to build up our MREL capacity, we issued multiple transactions in 2019 for a total amount of €6.3 billion.

ING's profit generating capacity remained strong, and after dividend reserves we included €2.1 billion of capital to our capital base.

ING's dividend policy aims to pay a progressive dividend that will reflect considerations including expected future capital requirements, growth opportunities available, net earnings, and regulatory developments. The Executive Board proposes to pay a total cash dividend of €2,689 million, or €0.69 per ordinary share, over the financial year 2019. This is subject to the approval of shareholders at the Annual General Meeting in April 2020.

See 'Note 52 Capital management' in the 'Consolidated Financial statements' for more information.

## Risk approach

ING's Risk Appetite Framework, which is complemented by the Non-Financial Risk Framework, provides a single coordinated approach and gives the business an overview of the various risks ING faces and how these are managed. The risk appetite is approved by both the Supervisory and Executive Boards. It defines our desired forward-looking risk profile and informs our strategic and financial planning. The framework is designed to withstand market volatility and stress while meeting regulatory requirements. We also have a process for internal control over financial reporting.

### Risk governance

ING's risk and control structure is based on the three lines of defence model, in which each line has its own distinct role, responsibilities and oversight. All employees are responsible for managing risk, with the Executive Board ultimately accountable.

The first line of defence comprises the heads of our business lines, who are best positioned to act in the best interests of both our customers and ING. They have primary ownership, accountability and responsibility for assessing, controlling and mitigating all financial and non-financial risks affecting their business, and ensuring financial statements, regulatory and risk reports are complete and accurate. The COO is responsible and accountable for proper security and controls on their local and global applications and IT platforms.

The specialist functions Risk Management and Compliance are the second line of defence, who support, review and, where necessary, challenge the first line. They oversee risk management and are co-responsible for articulating and translating the risk appetite into methodologies and policies for the rest of ING to follow. The second line constantly monitors for strategy changes that will impact ING's activities and evolves the risk appetite accordingly. They act to keep the risk profile within the defined risk appetite.

Corporate Audit is our third line of defence. It provides an independent assessment of our internal controls over the risks to our business processes and assets, including the risk management activities performed in the first and second lines of defence.

For more information see the 'Risk management' section.

## Climate change risk

The potential financial impacts of extreme weather events such as hurricanes, floods and heatwaves are elevating the risks associated with climate change. Our business activities can both significantly influence communities and the environment and be impacted by climate risks. As such, we take our responsibility to help mitigate this risk seriously.

For example, we've set ambitious targets to reduce financing for coal-power generation to close to zero by 2025, and no longer provide financing to new clients whose business is over 10 percent reliant on coal-fired power. By the end of 2025 we will not finance any clients in the utilities sector who are more than five percent reliant on coal. In addition, we are steering our loan portfolio to meet the well-below two-degrees goal of the Paris Climate Agreement. In 2019, we published our first progress report on Terra, our pathway towards climate alignment in the sectors most responsible for climate change.

To help our customers be more sustainable, environmental and social risk (ESR) assessments are integrated into our due diligence processes. We have an ESR framework that helps us make transparent choices about how, where and who we do business with. In 2019, this framework was renewed, based on input from customers, peers, NGOs and our own experts. For more information about ESR see the 'Risk management' section.

We expect climate change to remain firmly on ING's agenda, as well as the agendas of our customers and of regulatory and supervisory bodies around the world. We have committed to report in line with the recommendations of the Taskforce for Climate-related Financial Disclosures (TCFD) and we continue to work on the challenging exercise of translating potential climate risks and transition risks into financial risk for ING. Please see the Risk management section for more information on TCFD.

## Risk in the digital age

While digitalisation is enabling the easy, customer-oriented and secure service offering customers now expect, it is also amplifying non-financial risk. The more digital society becomes, the more important it becomes for banks to protect their customers, society and their own business against threats that could erode people's trust in our business and our sector. These include threats posed by cybercriminals, identity theft, misuse of data, security breaches, system failures and unethical business practices. Managing non-financial risk is therefore a priority for ING. It's a skillset we have to master to the same level of expertise as financial risk management.

### IT risk

Reputation starts with satisfied customers. In today's always-on, convenience-oriented society, people expect their bank to be available 24/7. Tolerance for technical failures is low. And customers can quickly and easily share their dissatisfaction online, increasing the risk of reputational damage, or move their account to another bank, risking a loss of business. We therefore have to ensure our systems are available whenever our customers need them. Round-the-clock access is the first element for delivering a differentiating digital experience for customers. To this end, ING continued in 2019 to focus strongly on managing exposure to IT risks, including the cost of new technologies that until proven effective have to run in parallel with legacy systems, user access management and increasing the efficiency and effectiveness of our IT structure and continuity of IT processing. For more information about how we protect customers and our bank against IT risks such as cyberattacks or loss of service, see the 'Innovation and transformation' chapter.

### Model risk

New technologies like artificial intelligence (AI) rely heavily on data. Data also drives more and more of ING's business decisions, providing the input for the models we use to calculate the value of savings, for example, or to calculate risk metrics. Our customers also use data to help them make better financial decisions. It is therefore imperative to get the right data at the right time to drive the right decisions. At the same time, models are becoming increasingly complex as regulations, customer needs and risk management techniques constantly evolve. To help mitigate the risk that our models get it wrong – leading to the risk of a loss of earnings or even a regulatory breach – we have a model risk management framework to identify, assess, control and monitor the risks caused by applying models across ING. In 2019, we initiated a programme to improve the availability and quality of our data, model governance and processes, further strengthening our risk modelling and data capabilities to give ING a competitive advantage.

### Data, privacy and cybersecurity

Customers trust us with their money and, increasingly, with their data. We have a social responsibility and a duty to maintain that trust and to safeguard them against loss or misuse of their data. Our duty of care is not only towards our customers, but there is a wider social responsibility to act as gatekeepers to the financial system.

In an increasingly open and connected environment we have to be ever more vigilant about data protection, data privacy and IT security. Regulations like the new European Payments Services Directive (PSD2) give customers more choice by opening up payments and money management to new players, including non-banks. But PSD2 also obliges banks to share account information with licensed third parties if our customers authorise us to do so. Any data or IT breach, irrespective of whether anything is actually lost or stolen, could severely damage customers' trust in our bank and in the entire sector. There may be legal, regulatory or compliance repercussions. This is an ever growing risk, given ING's platform ambitions and increasing cooperation with third-party providers.

To ensure the prudent use of data, there are local and global Data Ethics Councils to help manage data-related dilemmas and ensure our decisions are aligned with the values and behaviours in ING's Orange Code.

We have developed a new e-learning module for all employees underlining the importance of data, which was rolled out in early 2020.

ING has set solid standards in line with international guidelines for platform security, data management, cybercrime resilience and security monitoring, as well as for identity and access management. This aims to ensure the right people have the right access to the right resources at the right time. User Access Management remains an important element of our control framework to mitigate unauthorised and inappropriate access to our data and information. We are building on our cybercrime resilience to further enhance the control environment to protect, detect and respond to digital fraud, DDoS and targeted attacks. Read more about security and identity and access management at ING in the 'Innovation and transformation' chapter.

## Financial economic crime

As a global financial institution, ING is at risk of being used to launder the proceeds of crime, finance terrorism or for other financial economic crimes such as transactions involving a sanctioned person or country, or trade-controlled exports. Criminals are becoming ever more sophisticated as they harness new technologies like AI and machine learning. Given the growing number of digital card and payment transactions – around 13 billion in 2019 – ING faces an increased risk that some of these interactions are used for fraud or for money laundering purposes.

Technology can help us deal with these risks by improving customer due diligence processes and the prevention, detection, quality and speed of response to financial economic crime. For example, we developed a virtual alert handler that uses artificial intelligence to better detect suspicious transactions and customer behaviours, allowing our employees to concentrate on those alerts that actually require attention. An AI solution detects instances of 'smurfing', which is where large fraudulent transactions are broken up into smaller ones that are not picked up by conventional monitoring systems. An AI-based anomaly detection tool went live in September, which is used to uncover suspicious transactions in the clearing and settlement process between banks. And in Wholesale Banking we have developed a platform that uses advanced analytics to analyse transactions as part of the know your customer (KYC) process. It collects and connects data about payments, lending and financing to provide insights that would not normally be readily available.

Fighting financial crime is a challenge affecting the entire financial services industry. ING cooperates with other banks, law enforcement and regulators at national and European levels to strengthen the resilience of the financial system. This includes working with the Dutch central bank (DNB) and the Dutch Banking Association (NVB) to harmonise efforts to fight financial economic crime, as well as participating in public-private partnerships such as with the Dutch Financial Expertise Centre (FEC) to strengthen the integrity of the financial sector through preventative action to identify and combat threats.

In July 2019, we joined peers from other banks at the UK's Financial Conduct Authority TechSprint to find better ways of detecting and preventing financial crime. ING Labs innovates with others to create solutions like CoorpID, a centralised digital vault for corporate customers to store, control and share their KYC documentation in a secure way. We're also developing a platform to help banks that serve other financial institutions to be more effective in their KYC efforts. In September 2019, ING and four other Dutch banks announced the ambition to set up a joint organisation to monitor payment transactions.

We believe that sharing knowledge across the financial industry and with the authorities will allow us to manage and control our own KYC activities and risks more effectively and improve our management of non-financial risks.

## Know your customer

In the fight against financial economic crime, customer due diligence and transaction monitoring are indispensable. To address shortcomings in the execution of these, ING continued to deliver on its global KYC enhancement programme in 2019. This includes in Italy, where Banca d'Italia had identified shortcomings in our anti-money laundering processes. The global programme consists of enhancing customer due diligence files (documentation, data and identity verification) and structural solutions to become sustainably better in the way we fight financial economic crime. We also assess past transactions and follow the applicable reporting process should we identify any unusual transactions. At year-end, we had around 4,000 FTEs working on KYC-related activities.

The structural solutions that the KYC enhancement programme focuses on are divided into five pillars:

- Policies: Develop and roll out a global KYC policy, global KYC risk appetite statements, and customer and maturity assessments.
- Tooling: Develop and roll out a bank-wide digital KYC service platform, including standard processes and tools for customer due diligence, screening and monitoring.
- Monitoring: Translate risk assessment outcomes into scenarios and alert definitions that can be applied to transaction monitoring.
- Governance: Install a global KYC governance to ensure consistent decision-making on standards, operations, customer acceptance and continuous improvements.
- Knowledge and behaviour: Increase employee knowledge of KYC, provide specialist training and set up a behavioural risk department to carry out risk assessments, detect high-risk behaviours and intervene where needed.

See the 'Risk management' section for more information about the global KYC enhancement programme and ING's progress in each of these pillars. The main developments for 2019 are highlighted in the graphic below.

## KYC milestones in 2019

### Policies
- Updated KYC policy incorporating all existing policies relating to AML/FEC/customer due diligence
- Updated the environmental and social risk (ESR) framework
- Implemented a systematic integrated risk approach (SIRA) in all business lines globally

### Governance
- Continued to build global KYC organisation to develop consistent processes, work instructions, roles and responsibilities
- Established KYC Committees to manage and steer all KYC activities in the countries/regions and business lines
- Installed Client Integrity Risk Committees to steer decisions on client relationships based on compliance criteria

### Tooling
- Developed new customer due diligence case management modules for mid-corporate customers in Poland and private banking clients in Luxembourg. Roll out in other countries to follow
- Target adverse media screening tool rolled out in most locations
- ING innovations to automate and improve KYC include an anti-smurfing tool, virtual alert handler and anomaly detection tool

### Monitoring
- Introduced new standard transaction monitoring tooling, supported by risk-based scenarios with follow-up in terms of handling alerts and reporting suspicious activities
- Global customer activity monitoring (CAM) control guidance came into effect outlining a uniform CAM methodology framework
- ING and four other Dutch banks announced their intent to jointly monitor payment transactions
- Increased focus on KYC led to more accounts being closed, including those of customers who did not respond to requests for information

### Knowledge & behaviour
- Global KYC Academy set up
- Outcomes of behavioural risk assessments in the Netherlands, US and Philippines discussed at ING leadership days to raise awareness of high-risk behaviours
- Set up Behavioural Risk Management workstreams with senior managers and initiated interventions to address high-risk behaviours
- Held an employee ‘nudge’ lab to identify small behavioural changes that can positively improve KYC execution
- Conducted a behavioural risk assessment in Belgium. Outcomes and interventions to follow in 2020
- Piloted a campaign to raise awareness among customers of trade-based money laundering

## Behavioural risk

Wherever people work together they are influenced by group dynamics and beliefs that drive the way they make decisions, communicate with each other and take ownership. Behavioural risk management (BRM) is a new expertise to help us understand what drives the behaviours within our organisation, and identify high-risk behaviours that could negatively impact ING's reputation and performance.

Behavioural risk is complex and less tangible than other types of risks. Detecting and reducing high-risk behaviours requires a deep understanding of what drives them. In August 2018, we set up a global Centre of Expertise, which carries out behavioural risk assessments to identify, analyse and mitigate high-risk behaviours within ING and provides management with specific direction on how to change these behaviours.

The outcomes of the first assessments, which were conducted in the Netherlands, US and Philippines, were shared with the top 200 managers at ING's International Conference in March 2019, and with the departments involved. Based on these outcomes, a number of interventions that aim to change high-risk behavioural patterns have been implemented. Theory and evidence-based techniques and tools developed in behavioural science play an important role in designing and evaluating interventions.

Given the crucial role of leaders in creating the right conditions for employees, interventions are first initiated at leadership level. Leadership labs address topics such as 'governance and ownership', 'connection, alignment and trust' and 'collective learning'. Employee labs focus on implementing ideas identified during deep dives into behavioural drivers and solutions that require more development. The labs develop and test these ideas before they are implemented on a larger scale.

The BRM team works closely with other departments such as HR, Audit, Compliance and business units to align on and embed desired leadership and risk behaviours (i.e. speak up, psychological safety, communication, guiding leadership).

See the 'Risk management' section for more information about BRM.

## Compliance risk

ING faces the risk of compliance failures, especially in areas where regulations are unclear, subject to multiple interpretations, in conflict with each other, or where regulators revise their guidance. While we are vigilant in our efforts to comply with applicable laws and regulations, it remains a significant operational challenge to meet all the requirements within the regulatory timelines. People with the necessary knowledge and skills are scarce and implementing the necessary processes and procedures has significant implications for IT systems and data.

To help us manage and mitigate compliance risks we have a set of policies and procedures based on laws and regulations, as well as the standards defined for managing all non-financial risks as set out in ING's internal control framework. We provide training for employees on topics such as money laundering, terrorist financing, sanction and export control compliance and conduct risks such as conflicts of interest, misselling, corruption and protection of customers' interests. There is also training on risk culture, the Foreign Account Tax Compliance Act (FATCA), the Common Reporting Standard (CRS), and US withholding tax and information reporting regulations. Some of these trainings are specifically for risk and compliance experts, others aim to raise awareness among all employees and new joiners.

Tax policies, procedures and a tax control framework have been implemented to support management in mitigating potential tax risks in a prudent manner. Internal monitoring, control and reporting of tax-related risks take place on a continuous basis with regular reporting to various stakeholders. For 404/SOX purposes (section 404 of the Sarbanes-Oxley Act), an 'effectiveness of internal control statement' has been provided. Tax risk management is subject to Corporate Audit testing and evaluation. In the Netherlands, ING has opted for cooperative tax compliance ('horizontaal toezicht'), which implies overall transparency and disclosure of relevant tax risks to the Dutch tax authorities. Tax risks not only refer to ING's own tax position, but also to the risks in relation to the tax positions of our customers. In this respect, we have integrated a tax integrity assessment in our overall customer risk assessment process.

In 2019, we continued to support the business in the area of risk culture and monitoring compliance risk. This included training by compliance and data experts to enhance balanced decision-making that is in line with the Orange Code and consistent with compliance risk culture monitoring. It covered topics such as compliance risk awareness, group dynamics and tone from the top. We introduced a new global learning model in 2019 that aims to professionalise Compliance, KYC and Risk training and tailor it to our specific business needs. A Risk Academy has been set up for people working in Risk, with the aim of eventually bringing this training to a broader audience.

### Using AI to SPARQ compliance

ING has started using artificial intelligence to stay on top of the volume and increasing complexity of regulations that banks have to comply with. We are developing SPARQ, a platform that automates the process of turning regulation into policy. It gives insight into applicable regulations, identifies regulatory changes and links these directly to our policies, while documenting all the steps taken. This creates a clear and reliable audit trail that we can demonstrate to our regulators if necessary. In addition, in November we announced an investment in regtech firm Ascent, which uses machine learning to help companies improve regulatory compliance. The investment is via our fintech fund ING Ventures.

## Whistleblower policy

ING's Whistleblower policy enables employees to anonymously report any actual or suspected irregularity or misconduct that violates our Orange Code, ING's internal policies or any law or regulation. This can be done via internal or external channels, alongside normal reporting channels. In 2019, ING recorded 102 alleged irregularities as part of the Whistleblower process, including 52 reports of suspected breaches of Orange Code or unethical behaviour.

# Composition of the Executive Board and Management Board Banking

**R.A.J.G. (Ralph) Hamers (53)**

**CEO and chairman of the Executive Board ING Group, CEO ING Bank, chairman and head of Market Leaders (a.i. until 1 January 2020) of the Management Board Banking**

Ralph Hamers was appointed a member of the Executive Board of ING Group as of 13 May 2013, chief executive officer (CEO) and chairman of the Executive Board and Management Board Banking on 1 October 2013 (and reappointed 8 May 2017). His responsibilities include Innovation, Legal, Corporate Strategy, Global Human Resources, Global Communications and Brand Experience, and Corporate Audit Services. As head of Market Leaders a.i. he was responsible for ING's retail banking and wholesale banking activities in the Benelux.

**S.J.A. (Steven) van Rijswijk (49)**

**CRO ING Group and member of the Executive Board ING Group, CRO ING Bank and member of the Management Board Banking**

Steven van Rijswijk was appointed a member of the Executive Board of ING Group and member of the Management Board Banking as of 8 May 2017 and chief risk officer (CRO) as of 1 August 2017. He is responsible for all of ING's risk management functions and Global Analytics.

**T. (Tanate) Phutrakul (55)**

**CFO ING Group and member of the Executive Board ING Group, CFO ING Bank and member of the Management Board Banking**

Tanate Phutrakul was appointed as chief financial officer (CFO) of ING Group and ING Bank and member of the Management Board Banking on 7 February 2019. Subsequently, Tanate Phutrakul was appointed as a member of the Executive Board at the Annual General Meeting on 23 April 2019. He is responsible for ING's finance departments, Group Treasury (including capital management activities), Investor Relations, Procurement, Economic Research Department and Regulatory & International Affairs.

**M.I. (Isabel) Fernandez Niemann (51)**

**Head of Wholesale Banking and member of the Management Board Banking**

Isabel Fernandez was appointed a member of the Management Board Banking as of 1 September 2016 and appointed head of Wholesale Banking as of 1 November 2016. She is responsbile for ING's wholesale banking activities globally and for the Sustainability department.

**R.M.M. (Roel) Louwhoff (54)**

**COO/CTO and member of the Management Board Banking**

Roel Louwhoff was appointed a member and chief operations officer (COO) of the Management Board Banking as of 1 May 2014. He was also appointed chief Transformation Officer (CTO) as of 1 October 2016. He is responsible for operations, IT (including standarisation), data management, tranformation, KYC (business line responsibility), information security, and process management.

**A. (Aris) Bogdaneris (56)**

**Head of Challengers & Growth Markets and member of the Management Board Banking**

Aris Bogdaneris was appointed a member of the Management Board Banking as of 1 June 2015. He is also head of Challengers & Growth Markets, responsible for all markets where ING is active in both retail banking and wholesale banking outside the Benelux.

# ING shares

## Share information

The authorised share capital of ING Group N.V. consists of ordinary shares and cumulative preference shares. Currently, only ordinary shares are issued, while a right to acquire cumulative preference shares has been granted to the ING Continuity Foundation. Each share in the capital of ING Group N.V. gives entitlement to cast one vote.

## Listings

ING Group ordinary shares are listed on the stock exchanges of Amsterdam, Brussels and New York (NYSE). Options on ING Group ordinary shares or in the form of American depository receipts (ADRs) are traded on the Euronext Amsterdam Derivative Markets and the Chicago Board Options Exchange.

## Shareholders and ADR holders with stakes of 3 percent or more

Pursuant to the Dutch Financial Supervision Act, shareholders and holders of ADRs of ING Groep N.V. are required to provide updated information on their holdings once they reach, exceed, or fall below threshold levels of 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%. As of the publication date of this report, ING Group is not aware of shareholders, potential shareholders or investors with an interest of three percent or more in ING Group other than BlackRock Inc and Artisan Investments GP LLC.

**Authorised and issued capital**[1]

| in EUR million | Year-end 2019 | Year-end 2018 |
|---|---|---|
| Ordinary shares | | |
| – authorised | 147 | 147 |
| – issued | 39 | 39 |
| Cumulative preference shares | | |
| – authorised | 46 | 46 |
| – issued | - | - |

**Number of shares in issue and shares**

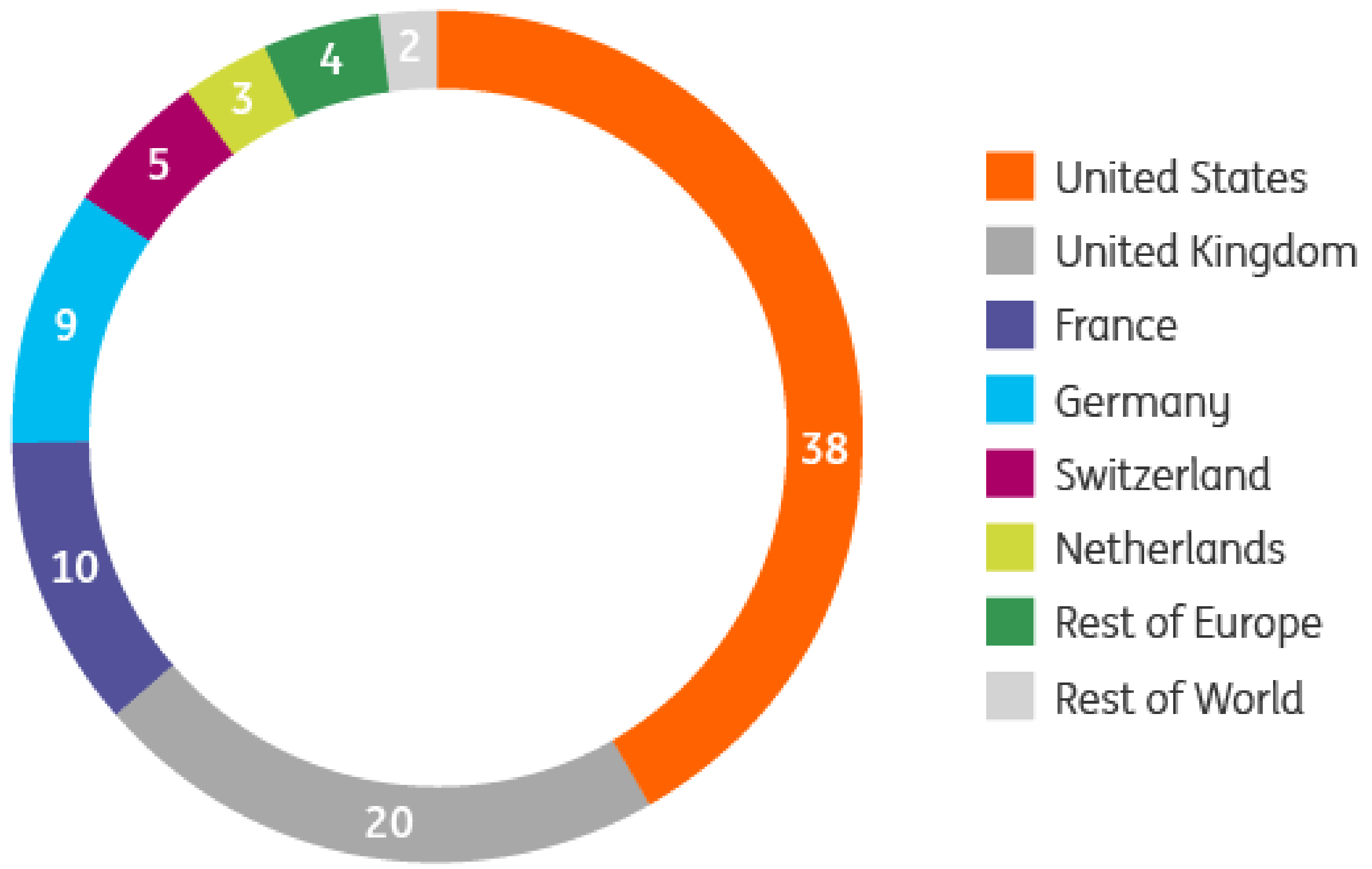
| in EUR million | Year-end 2019 | Year-end 2018 |
|---|---|---|
| Ordinary shares | 3,896.7 | 3,891.7 |
| Own ordinary shares held by ING Group and its subsidiaries | 0.9 | 1.1 |
| Ordinary shares outstanding in the market | 3,895.8 | 3,890.6 |

**Prices of ordinary shares**

| Euronext Amsterdam by NYSE Euronext in EUR million | Year-end 2019 | Year-end 2018 | Year-end 2017 |
|---|---|---|---|
| Price – high | 12.05 | 16.66 | 15.98 |
| Price – low | 8.34 | 9.19 | 12.93 |
| Price – year-end | 10.69 | 9.41 | 15.33 |
| Price/earnings ratio[1] | 8.7 | 7.8 | 12.1 |
| Price/book value ratio | 0.77 | 0.72 | 1.18 |

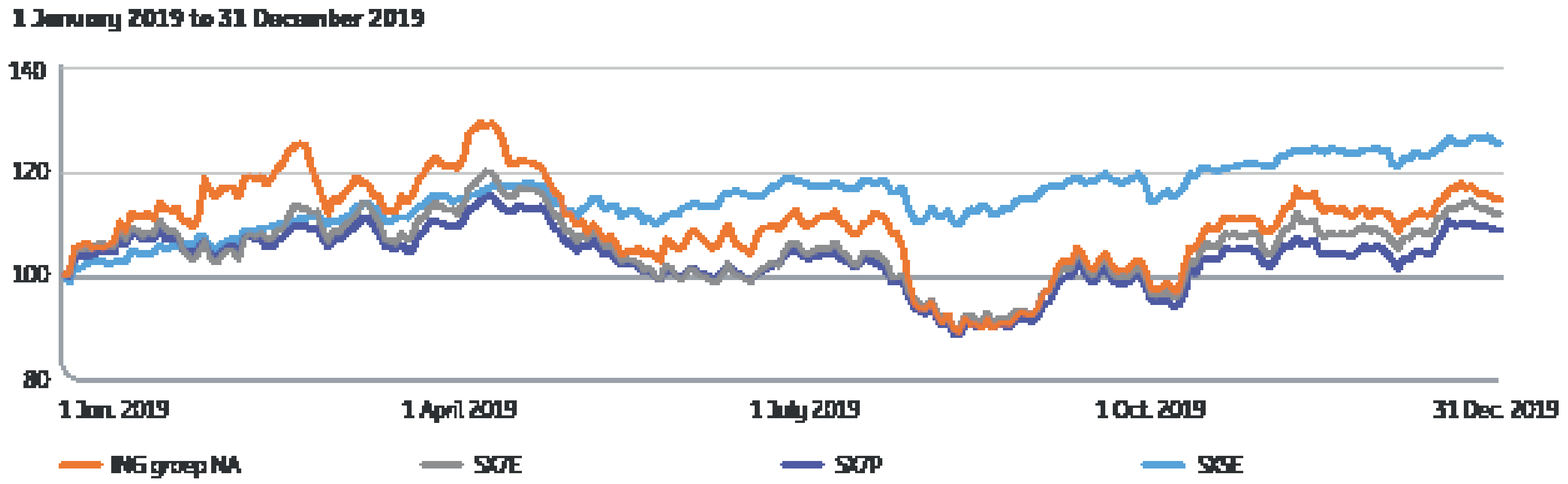
[1] Based on the share price at year-end and the earnings per ordinary share for the financial year.

## Geographical distribution of ING ordinary shares (in %) [1]




1 These figures based on 4Q 2019 estimates of institutional share ownership provided by IPREO and includes ordinary shares represented by American depository receipts.

## One-year price development of ING ordinary shares




## Credit ratings

ING's short- and long-term credit ratings are shown in the table below. Each of these ratings reflects only the view of the applicable rating agency at the time the rating was issued, and any explanation of the significance of a rating may be obtained only from the rating agency. A security rating is not a recommendation to buy, sell or hold securities and each rating should be evaluated independently of any other rating. There is no assurance that any credit rating will remain in effect for any given period of time or that a rating will not be lowered, suspended or withdrawn entirely by the rating agency if, in the rating agency's judgement, circumstances so warrant. ING accepts no responsibility for the accuracy or reliability of the ratings.

### Main credit ratings of ING at 31 December 2019

| | Standard & Poor's | | Moody's | | Fitch Ratings | |
|---|---|---|---|---|---|---|
| | Rating | Outlook | Rating | Outlook | Rating | Outlook |
| **ING Groep N.V.** | | | | | | |
| Long-term | A- | Stable | Baa1 | Stable | A+ | Stable |
| **ING Bank N.V.** | | | | | | |
| Long-term | A+ | Stable | Aa3 | Stable | AA- | Stable |
| Short-term | A-1 | | P-1 | | F1+ | |

## Sustainability ratings

ING Group's approach to sustainability is shaped by our specific skills and expertise as a financial company, our vision of the future and the expectations of our stakeholders. Reviews of our performance by sustainability research and rating agencies help us to improve our strategy and policies. ING's scores and rankings in key sustainability benchmarks show our progress as follows.

**External reviews of our sustainability performance**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Sustainalytics[1] | ESG Risk Rating[1]: 22.3 (12th percentile) Position: 2nd in market cap peer group | ESG Rating score: 80 (out of 100) Position: 16 (out of 334 financial peers) | Score: 90 (out of 100) Included in World and Europe Index |
| MSCI ESG | Rating: A | Rating: A | Rating: A |
| CDP (Carbon Disclosure Project) | A List for climate leadership | A List for climate leadership | A List for climate leadership |
| FTSE4Good Index Series | Constituent | Constituent | Constituent |
| Euronext VigeoEiris Indices Europe 120, Eurozone 120, Benelux 120 | Constituent | Constituent | Constituent |

1 The 2019 ESG Risk Rating reflects a new methodology which does not compare with the previously reported ESG Ratings which Sustainalytics has decided to discontinue.

## Important dates in 2020

| | |
|---|---|
| **28 April** | 2020 Annual General Meeting |
| **30 April** | Ex-date for final dividend 2019 (Euronext Amsterdam) |
| **4 May** | Record date for final dividend 2019 entitlement (Euronext Amsterdam)* |
| **4 May** | Record date for final dividend 2019 entitlement (NYSE)* |
| **8 May** | Publication results 1Q2020 |
| **11 May** | Payment date final dividend (Euronext Amsterdam)* |
| **18 May** | Payment date final dividend 2019 (NYSE)* |
| **6 August** | Publication results 2Q2020 |
| **10 August** | Ex-date for interim dividend 2020 (Euronext Amsterdam)* |
| **11 August** | Record date for interim dividend 2020 entitlement (Euronext Amsterdam) |
| **17 August** | Record date for interim dividend 2020 entitlement (NYSE)* |
| **18 August** | Payment date interim dividend 2020 (Euronext Amsterdam) * |
| **24 August** | Payment date interim dividend 2020 (NYSE)* |
| **5 November** | Publication results 3Q2020 |

All dates are provisional
* Only if any dividend is paid

# About this report

Our stakeholders need information on our financial and non-financial performance to assess our ability to create value in the short, medium and long term. We believe that integrated reporting is the broad-based framework that can help our stakeholders and the providers of capital to make decisions that are forward looking, inclusive and impactful.

## Our approach to integrated reporting

An integrated report contains information on an organisation's financial and non-financial capital inputs, outputs and impacts. By disclosing our financial and non-financial results, strategy and management approach in the context of external developments, risks and opportunities, we aim to enable our stakeholders to assess how we create value. Our ambition is to continue to improve the integration of our financial and non-financial disclosures year by year.

### Governance and responsibility

The contents of ING's integrated annual reports are compiled with active input from business experts, vetted by senior managers, and discussed and approved annually by members of the Management Board Banking, Executive Board and Supervisory Board. The final approval is given by the Supervisory Board.

### Report content and materiality

In drawing up content for this report we have taken into account the topics that can have a material impact on our business, including risks, opportunities, regulations and sector trends.

As a large commercial bank, we recognise that we have a direct economic, social and environmental impact, but also a significant indirect impact through our lending and investment activities. ING's non-financial data reporting protocol describes key performance indicators related to our material topics. We report data on these and other relevant key performance indicators in the Value Creation Model section of Our Strategy and How We Create Value chapter.

We continuously listen to our stakeholders and adapt our strategy and reporting to meet their evolving expectations. As part of our materiality analysis in 2019 we consulted key stakeholder groups - retail customers, business clients, investors, academia, civil society organisations, financial regulators, employees and senior management – in a quantitative engagement process. The results of our materiality analysis were used to define the content of this report. The report including materiality disclosures is reviewed and approved by the Executive Board.

Read more in the 'The world around us' chapter.

### Audience

This report is intended to serve the information needs of key stakeholder groups that affect, and are affected by our business. An overview of key figures and impacts in 2019 is available on www.ing.com. Please refer to the Stakeholder engagement section in the Non-financial appendix.

Sustainability rating agencies and analysts can find data on non-financial key performance indicators in the 'Non-financial appendix' and at www.ing.com.

### Reporting guidelines

This report, including the Non-financial appendix, is prepared in accordance with the GRI Standards: Core option and the Dutch Accounting Standard 400. The content and quality criteria specified by the guidelines, including sustainability context, stakeholder inclusiveness, materiality, completeness, balance, comparability, clarity, timeliness, accuracy and reliability, are integral to our reporting process. In line with the Core option guidelines, we have included the Disclosure on Management Approach (DMA) for each material topic and the GRI indicators most relevant to our business. For some material topics, we have introduced new or additional indicators, as can be found in the GRI and SASB Index. This report follows the Sustainability Accounting Standards Board (SASB) codified standards for commercial banks.

The Framework of the International Integrated Reporting Council (IIRC) served as a reference in drawing up the content for this report, including for our Value Creation Model. Moving to the Core option will allow us to focus on improving our report integration as per the IIRC framework.

## Data compilation and boundaries

All financial data in this report is collected in line with annual accounting standards. The non-financial performance data published in this report covers five key topics: sustainable business, customers, human capital, environment and community investment. We extract or derive data on sustainability-related business activities, customers and human capital from our business systems, in line with the data in our financial statements. Data on the topics environment and community investment is collected through an online data management system. The centralised data processing team at ING Group validates and processes the environmental data from our operations worldwide in collaboration with an independent, third-party consultancy.

### Scope and boundaries

Through our materiality assessment we ensure that all economic, social and environmental topics relevant to our key stakeholders are addressed in this report. The report follows an annual cycle covering the period 1 January to 31 December. Our 2019 report is published on 5 March 2020. The data and content of this report and Non-financial Appendix aim to provide a concise, accurate and balanced account of ING's economic, social and environmental performance in 2019. Our approach and performance are explained per topic either in text, by referring to our policies or by providing data and progress on targets.

## Assurance

We value the accuracy and reliability of all information and data in this report, both financial and non-financial. Therefore assurance for the non-financial information in the Report of the Executive Board, including the accompanying Non-financial Appendix, is provided by KPMG Accountants N.V. (KPMG). KPMG has reviewed, and provided a limited level of assurance, on the non-financial information in the Report of the Executive Board as defined in the infographic in the World Around Us chapter and in the Non-financial Appendix for the year 2019. KPMG also audited, and provided a reasonable level of assurance, on the 'What matters most to our stakeholders' section in the Non-financial appendix, the data for the Net Promoter Score for Retail Banking, the feeling of financial empowerment and system availability.

The data with a footnote (1) in the Performance Highlights table is within the reasonable assurance scope. KPMG audited the financial statements 2019 of ING Group. See the 'Independent auditor's assurance report'.

## Future-oriented statements

In this integrated annual report we also look forward and share our vision, ambitions, strategy, opinion and plans for the future. These forward-looking statements can be recognised by terms such as:

- aims
- expect
- anticipate
- intend
- plan
- believe
- seek
- see
- will
- would
- target
- forecast
- of the opinion

These forward-looking statements are based on management's current beliefs and assumptions about future activities and are subject to uncertainties. Therefore our assurance provider cannot assure these statements.

## Feedback

This report aims to give all our stakeholders a balanced and complete overview of our activities and ability to create and sustain value. We welcome stakeholder reactions and views. Please send us your feedback via communication@ing.com.

### Report of the Executive Board

The 'Corporate Governance' chapter and the 'Dutch Corporate Governance Code Statement by the Executive Board' are incorporated by reference in this Report of the Executive Board.

Amsterdam, 2 March 2020
The Executive Board

# Assurance report of the independent auditor

To: the Annual General Meeting of Shareholders and the Supervisory Board of ING Groep N.V.

## Our conclusion on the Non-Financial Information and our opinion on the Four Specific Topics

We have:

- reviewed the non-financial information in the Report of the Executive Board as defined on page 13 (excluding information related to financial performance), the 'Environmental and Social Risk Framework' section on page 183-186 of the Risk Management chapter and the Non-financial appendix (hereafter: 'the Non-Financial Information'); and
- audited the 'Understanding what matters most' section (page 430 and 431), the data for the Net Promoter Score for Retail Banking, Feeling of Financial Empowerment and System Availability, marked with the symbol Ⓐ in the Report of the Executive Board, and the 'Non-financial appendix' (hereafter: 'the Four Specific Topics');

of ING Groep N.V. ('ING Group') based in Amsterdam, The Netherlands.

A review is aimed at obtaining a limited level of assurance. An audit engagement is aimed at obtaining reasonable assurance.

Based on our procedures performed, nothing has come to our attention that causes us to believe that the Non-Financial Information is not prepared, in all material respects, in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative ('GRI') and supplemental reporting criteria as described in the section 'About this report'.

Furthermore, in our opinion the Four Specific Topics are prepared, in all material respects, in accordance with the applied reporting criteria as described in the section 'About this report'.

## Basis for our conclusion on the Non-Financial Information and our opinion on the Four Specific Topics

We performed our review on the Non-financial Information and our audit on the Four Specific Topics in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten)' (assurance engagements other than audits or reviews of historical financial information (attestation engagements)). Our responsibilities in this regard are further described in the 'Auditor's responsibilities' section of our report.

We are independent of ING Group in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' ('ViO', Code of Ethics for Professional Accountants, a regulation with respect to independence). Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' ('VGBA', Dutch Code of Ethics).

We believe the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion about the Non-financial Information and our opinion on the Four Specific Topics.

## Reporting criteria

The Non-Financial Information and the Four Specific Topics need to be read and understood together with the reporting criteria. ING Group is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The reporting criteria used for the preparation of the Non-Financial Information and the Four Specific Topics are the Sustainability Reporting Standards of the GRI and the supplemental reporting criteria as disclosed in the section 'About this report'.

## Scope of the group review and audit

ING Group is the parent company of a group of entities. The Non-financial Information and the Four Specific Topics incorporate the consolidated information of this group of entities to the extent as specified in section 'About this report'. Our group assurance procedures consisted of both assurance procedures at ING corporate level and at country level. Our selection of countries in scope of our assurance procedures is primarily based on the country's individual contribution to the consolidated information.

By performing our assurance procedures at country level, together with additional assurance procedures at corporate level, we have been able to obtain sufficient and appropriate assurance evidence about the group's reported information to provide a conclusion about the Non-financial Information and an opinion on the Four Specific Topics.

## The Key Assurance Matter

The Key Assurance Matter of our review and audit is the matter that, in our professional judgement, was of most significance in our review of the Non-Financial Information and our audit of the Four Specific Topics. We have communicated the Key Assurance Matter to the Supervisory Board. The Key Assurance Matter is not a comprehensive reflection of all matters discussed.

This matter was addressed in the context of our audit of the Four Specific Topics as a whole and we do not provide a separate opinion on this Key Assurance Matter.

## System Availability

### Description

ING Group's strategic focus includes improving customer experience. The related performance is monitored by the KPI 'System Availability'. As disclosed in the report of the Executive Board, ING Group strives to maintain a high level of system availability of the online payment channels. This KPI is reported for retail customers in the Netherlands and Belgium and wholesale banking customers globally. Considering the importance of this KPI and changes in the tooling used for monitoring System Availability, we identified System Availability as an important indicator for our audit.

### Our response

We obtained an understanding of the data collection process, evaluated the changes made during the year in tooling used for monitoring, and tested the effectiveness of the relevant controls for the Netherlands, Belgium and wholesale banking clients globally. We assessed the applicability, clarity and consistency of the definitions applied and re-performed the aggregation and calculation of the reported indicator. In addition, we inspected incident logging reports and performed a media-search for reported unavailability for the Netherlands and Belgium and Wholesale Banking globally.

### Our observation

In our professional judgement, the results of our procedures regarding the KPI System Availability were satisfactory.

### Limitations to the scope

The Non-Financial Information and the Four Specific Topics includes prospective information such as ambitions, strategy, plans, expectations and risk assessments. Inherent to prospective information, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Non-Financial Information and the Four Specific Topics.

The references to external sources or websites in the Non-Financial Information are not part of the Non-Financial Information as reviewed by us. We therefore do not provide assurance on this information.

### The Executive Board's Responsibilities for the review of the Non-Financial Information and the audit of the Four Specific Topics

The Executive Board of ING Group (hereafter: 'Executive Board') is responsible for the preparation of the Non-Financial Information and the Four Specific Topics in accordance with the reporting criteria as included in the section 'Reporting criteria' of our report, including the identification of stakeholders and the definition of material topics.
Furthermore, the Executive Board is responsible for such internal control as it determines is necessary to enable the preparation of the Non-Financial Information and the Four Specific Topics are free from material misstatement, whether due to fraud or error.

The Supervisory Board is responsible for overseeing the reporting process of ING Group.

### Auditor's responsibilities for the review of the Non-Financial Information and the audit of the Four Specific Topics

Our responsibility is to plan and perform our review and audit engagement in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion and opinion.

Procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing from, and are less in extent than, procedures performed for a reasonable assurance engagement. The level of assurance obtained in review engagements with a limited level of assurance, is therefore substantially less than the assurance obtained in audit engagements.

Our audit of the Four Specific Topics has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material misstatements due to fraud or error.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of this Non-financial Information and the Four Specific Topics. The materiality affects the nature, timing and extent of our assurance procedures and the evaluation of the effect of identified misstatements on our opinion.

We apply the 'Nadere Voorschriften Kwaliteitssystemen' ('NVKS', Regulations for Quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our examination included among others:

- performing an analysis of the external environment and obtaining an understanding of relevant social themes and issues, and the characteristics of the company;
- evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures of the Non-Financial Information and the Four Specific Topics. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by the Executive Board;
- obtaining an understanding of the reporting processes for the Non-Financial Information and Four Specific Topics, including obtaining a general understanding of internal control relevant to our review;
- identifying areas of the Non-Financial Information and Four Specific Topics with a higher risk of misleading or unbalanced information or material misstatements, whether due to fraud or error;
- designing and performing further assurance procedures aimed at determining the plausibility of the Non-Financial Information and Four Specific Topics responsive to this risk analysis. These procedures included among others:
  - interviewing management and relevant staff at corporate level responsible for the non-financial strategy, policy and results;
  - interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the Non-Financial Information and Four Specific Topics;
  - obtaining assurance information that the Non-Financial Information and the Four Specific Topics reconcile with underlying records of the company;
  - reviewing, on a limited test basis, relevant internal and external documentation;
  - performing an analytical review of the data and trends;
- evaluating the consistency of the Non-Financial Information and the Four Specific Topics with the information in the Annual Report which is not included in the scope of our review;
- evaluating the overall presentation, structure and content of the Non-Financial Information and the Four Specific Topics;
- evaluating whether the Non-Financial Information and the Four Specific Topics as a whole, including the disclosures, reflect the purpose of the reporting criteria used.

Additionally, our audit of the Four Specific Topics included, on top of the above, among others the following procedures:

- Identifying and assessing the risks of material misstatement of the Four Specific Topics, including being misleading or unbalanced, whether due to fraud or error, designing and performing assurance procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from errors, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtaining an understanding of internal control relevant to the examination in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Testing the design, implementation and operating effectiveness of IT-relevant controls for the System Availability indicator.
- Evaluating the reliability of external experts in providing input data for the Net Promoter Score and Feeling of Financial Empowerment indicators.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the review and audit, and significant findings that we identify during our review and audit.

Amstelveen, 2 March 2020

KPMG Accountants N.V.
M.A. Hogeboom RA

# Chairman's statement

2019 was a tough year, but also one in which ING performed solidly. As Supervisory Board we look back on a very intensive year with important topics on our agenda, including KYC/AML, progress on the delivery of ING's strategy, the proposed updates of our remuneration policy and continuous dialogue with stakeholders.

## Challenging environment

2019 was marked by a weakening of global economic growth and by persistent low interest rates that pressured results. The crisis of multilateralism in the form of US-China trade tensions and Brexit contributed to continued political uncertainty. And increasing demands in the areas of regulation and taxation also increased the complexity of the business environment for banks.

Despite this challenging context, ING performed well. And I'm pleased with the important steps it took to support the fight against climate change. These included ING's role as a founding signatory of the Principles for Responsible Banking. Another important step was the publication of the first progress report on ING's Terra initiative to steer its lending portfolio to support the Paris Climate Agreement's aim to limit the rise in global temperatures to well under two degrees.

## Implementing Think Forward – a journey

One of our tasks as Supervisory Board is to monitor the progress of the implementation of ING's Think Forward strategy, and in particular the ambition to become a go-to financial services platform offering customers a uniform experience based on a mobile-first approach. In 2019, ING made significant progress on 'Unite be+nl' to create one customer interaction platform in the Benelux.

At the same time, we also realise that we're on a journey, and that means making adjustments when circumstances require it. In 2019, that included applying lessons learned in the approach to combining operations in 'Unite be+nl', as well as adjusting innovation and transformation priorities in order to free up resources needed to focus on our know your customer (KYC) and anti-money laundering (AML) enhancement programmes. This had an impact on the progress of Think Forward priorities.

## KYC/AML

The Supervisory Board is continuously monitoring ING's KYC and AML enhancement efforts. These are progressing well. We see the organisation taking this on, and in particular we see the development of a strong mindset based on the belief that this is an essential part of ING's strategy and values.

At the same time, I want to stress the importance of a systemic approach to fight money laundering. There is a real urgency here to take big steps to come to that systemic approach. Working separately, individual banks struggle to deal effectively with this issue. Efforts to counter criminal activity are hampered by the limited view that an individual institution has of the whole chain of a transactions across entities and borders. Tackling this at the country level, and preferably at the European level, is essential to countering money laundering in an effective and efficient way.

I realise that achieving this systemic approach will not be easy, since it involves cooperation between national authorities and regulators and changes to privacy laws and how information is shared between banks and tax and legal authorities. But a joint approach is essential to fight the many forms of financial economic crime.

I want to stress here the importance of completing the Banking Union in Europe. It's essential for safeguarding the competitiveness of European banks and creating a level playing field. It can also play an important part in achieving the cooperation in the area of financial economic crime that is so needed.

## Supervisory Board in 2019

2019 was an intensive year for the Supervisory Board members, who committed a lot of time to fulfilling their responsibilities. Supervising an international bank like ING is becoming more and more complex and as a result more time consuming. We've extended the length and number of our meetings and also of committee meetings. We also travelled to various ING countries and visited local ING operations.

In addition to our normal activities, we dedicated significant amounts of time to KYC and AML priorities. We visited ING's local and centralised compliance/KYC operations in Poland, Belgium, Slovakia and Romania, and we'll continue visiting operations in 2020. These visits help us understand the frontline dilemmas and challenges of ING's people, enhance our insight and understanding and give an important signal that compliance/KYC is taken seriously at the highest level within ING.

A high level of engagement is essential to fulfill the role that society wants us as the Supervisory Board to play. I'm grateful to my Supervisory colleagues for their commitment and the investment of their time, without which this engagement would not be possible.

The Remuneration Committee also put a great deal of work into the preparation of the proposed update to ING's corporate board remuneration policies as required by the new Shareholders' Rights Directive that took effect on 1 January 2020. Under the leadership of Mariana Gheorghe and later Herna Verhagen the members worked together to define policies on remuneration for both the Executive and Supervisory Boards. The new policies will be on the agenda of the Annual General Meeting in 2020. For more information see the chapter on Remuneration in this report.

## Stakeholder dialogues

In preparing the new remuneration policies, we engaged with a wide range of internal and external stakeholders to hear their views and thoughts. This was part of a continuous dialogue in 2019 that I and the Supervisory Board's members had with various stakeholders. A dialogue that is deepening and broadening. As the pace of change in the world increases and ING's role in society transforms, we'll continue to intensify these dialogues, especially on complex and sensitive matters.

## Education and self-assessment

Education was an important part of our activities throughout the year. In addition to our annual Supervisory Board Knowledge Days, we had a number of educational sessions on specific topics and made visits to ING's operations throughout the year. We all valued these activities and they contributed to a better insight into topics that are important to ING. They also give us a valuable opportunity to interact directly with senior managers and employees across the organisation.

The Supervisory Board also spent time reflecting on longer-term succession planning for the Executive Board, the Management Board Banking, the Supervisory Board and its committees. It's important to make sure that ING, and we as Supervisory Board, are ready for the future and that we have the right skills and experience.

Valuable skills and experience also departed from the Supervisory Board when Robert Reibestein, chairman of the Risk Committee, announced he would resign as per 1 January 2020 due to health reasons. Robert was a very capable and experienced Supervisory Board member, and his presence on the board greatly benefitted ING. I want to thank him for his significant contribution to ING.

Self-assessment is important to enhance our performance as a collective and as individual members and to determine where we can improve ourselves. Our 2018 annual self-assessment pointed out that we needed to improve our stakeholder management and dialogue and enhance Supervisory Board (committee) meeting effectiveness. In our report you can read about the actions we took in response to the 2018 self-assessment and the ones we have defined for this year, resulting from the 2019 self-assessment. We took steps to ensure that the 2019 self-assessment approach and set-up were made more comprehensive, not only for the Supervisory Board, but also for the Executive Board and Management Board Banking. These now more specifically address the 'what' and the 'how'. We believe this also better aligns with developments among external stakeholders' and their expectations.

## Departure CEO Ralph Hamers

In late February 2020, ING's CEO Ralph Hamers announced that he would be leaving ING as of 30 June 2020 to take up the position of Group Chief Executive Officer of UBS Group AG on 1 November 2020.

I very much regret to see Ralph leave. On behalf of the ING Supervisory Board, I want to thank him for all his contributions to ING in his 29 years of dedicated service. Ralph has done an exemplary job in preparing our bank for the future with the Think Forward strategy. His vision and customer focus have been an inspiration throughout the seven years he served as CEO. In that time he has transformed ING into a leading digital bank, and put ING on the path to becoming the go-to financial platform for customers. He has created value for all stakeholders and played a leading role in driving sustainability efforts in the financial industry.

The Supervisory Board has full confidence in ING's strong management team and the continuation of the execution of our strategy. We will continue to build on the foundations Ralph has laid and we believe in our strategic direction.

Together with my Supervisory Board colleagues I am now in the process of identifying and nominating a suitable successor. Further announcements on the succession process will be made if and when appropriate.

## Thanks to all employees

On behalf of all my colleagues, I want to thank all our ING employees worldwide for their efforts to put into practice ING's purpose to empower people to stay a step ahead in life and in business. We value the contributions of all employees and hope we can count on you in the future. Your loyalty and engagement are essential in building the ING of tomorrow.

**Hans Wijers**

Chairman of the Supervisory Board

Amsterdam, 2 March 2020

# Report of the Supervisory Board

In 2019, the Supervisory Board and its committees continued to focus on overseeing and constructively challenging ING's management in their efforts to implement the Think Forward strategy. Other important topics of attention included the preparations for updating the Executive Board and Supervisory Board remuneration policies to reflect new Shareholders' Rights Directive (SRD II) requirements that take effect on 1 January 2020 and ING's global AML/KYC priorities and discharge following the investigation by Dutch authorities.

The Supervisory Board met 10 times in 2019. On average, 95 percent of the Supervisory Board members were present at the meetings. This attendance rate illustrates that the members of the Supervisory Board are continuously engaged with ING and are able to devote sufficient time and attention to overseeing ING's affairs. Since 2018, the Supervisory Board discusses and reconfirms all of its members' outside positions on an annual basis and approves any intended outside positions when they occur, among other topics in order to safeguard this level of engagement.

The Executive Board and Management Board Banking were present during each regular Supervisory Board meeting. For part of the regular meetings only the chief executive officer was present; this was dependent on the nature of the topics being addressed. The Supervisory Board also had sessions with its individual members only, prior to its regular meetings when justified by the nature of the topics on the agenda. The purpose of pre-meetings and Supervisory Board-only meetings is to allow the Supervisory Board independent reflection on, and consideration of, important matters in the absence of the Executive Board and Management Board Banking. The Supervisory Board aims to strike a balance between the interests of all stakeholders while maintaining an open dialogue with ING's internal organisation and external supervisors.

Besides the topics mentioned in the introduction of this report, the Supervisory Board also focused on the progress and delivery of the various transformation initiatives and how these relate to external developments in areas such as the regulatory domain, to ensure the right priorities continue to be set, with the appropriate allocation of resources. Also discussed were the anticipated impact of the low interest rate environment, model risk, Basel IV, IFRS 16, SRD II and several topical regulatory themes with a global ING scope such as ICAAP, compliance, IT, sourcing, and suitability requirements for boards and key function holders. Furthermore, the Supervisory Board discussed the financing of the company in accordance with our capital and liquidity adequacy in line with our annually updated Risk Appetite Framework, dividend capacity and ongoing supervisory developments.

At the 2019 Annual General Meeting (AGM), a majority of our shareholders voted not to discharge the (former) members of the Executive Board and Supervisory Board from their potential liability against the company for their duties performed for the 2018 financial year– the year in which the settlement agreement with Dutch authorities had a significant negative impact on ING. As clearly stated at the 2019 AGM, and in all other communication with shareholders and investors before and since the meeting, ING fully understands the dissatisfaction expressed through this vote and takes this matter very seriously.

The Supervisory Board, together with the Executive Board, regarded the rejection of the discharge as a clear signal and firm encouragement to continue the know your customer (KYC) enhancement programme that was already launched in 2017. This programme is designed to ensure that ING structurally improves its gatekeeping function in the area of Customer Due Diligence (CDD) and Anti-Money Laundering (AML) to a sustainable high level. For further details on this programme, read more in the 'Developments in risk and capital management' chapter and the Risk Management section.

Ahead of the 2019 AGM, ING had interactions with large institutional shareholders, Dutch shareholder interest groups and proxy voting advisors. During these engagements—which ING initiates each year ahead of its AGM—views were exchanged on topics including the 2019 shareholder resolutions, corporate governance matters, and the measures ING has in place to improve its management of non-financial risks.

In August 2019, the Executive Board and Supervisory Board published a letter expressing their understanding of the shareholder vote against discharge and detailing the actions ING has undertaken with respect to the global KYC enhancement programme. This letter was published in the General Meeting section on www.ing.com and was proactively distributed to the investment community.

In addition, ING has consistently provided regular updates on the progress of structural improvements to compliance policies, tooling, monitoring, governance, and knowledge and behaviour to bring ING's gatekeeping function in the area of Customer Due Diligence and Anti-Money Laundering to the appropriate level. These updates can be found, for example, in ING's quarterly reporting and on the corporate website www.ing.com, under the 'About us' section.

The Supervisory Board, Executive Board and Management Board Banking are committed to rebuilding trust in ING and will continue to be open and transparent on these matters. The Supervisory Board, Executive Board and Management Board Banking appreciate having the opportunity to interact with ING's shareholders and other stakeholders—their views are invaluable to maintaining a constructive dialogue as ING moves forward.

ING interacts with shareholders and other stakeholders on a daily basis. Naturally, the settlement and its resulting impact on ING have been frequent topics on which engagements have taken place, and on which ING continuously reports progress. Further details on ING's bilateral contacts with shareholders can be found in the 'Corporate governance' chapter of this report.

*Please refer to Note 46 to the consolidated financial statements of ING Group for more information.*

| SB Attendance 2019[1] | SB | RiCo | AC | NCGcom[2] | RemCo[3] |
|---|---|---|---|---|---|
| Wijers (chairman) | 9/10 | - | 5/5 | 12/13 | 10/10 |
| Lamberti (vice-chairman) | 9/10 | 7/8 | 4/5 | - | - |
| Balkenende | 10/10 | 7/8 | - | - | - |
| Boyer | 8/10 | 8/8 | 5/5 | - | - |
| Breukink | 3/5 | - | - | 3/4 | 1/2 |
| Gheorghe | 9/10 | 7/8 | - | 12/13 | 7/7 |
| Haase | 10/10 | - | 5/5 | - | - |
| Rees | 5/5 | 5/5 | - | - | - |
| Reibestein | 10/10 | 8/8 | 5/5 | - | 9/10 |
| Verhagen[4] | 1/1 | - | - | 3/3 | 4/4 |
| **Total attendance[4]** | **95%** | **93%** | **96%** | **91%** | **97%** |

1 This SB attendance overview shows the regular SB (committee) meetings that took place during the year.
2 Additional NCGcom meetings took place in 2019 in view of medium to longer term board succession planning.
3 Additional RemCo meetings took place in 2019 because of increased attention to the board remuneration policies, among others in view of SRD II.
4 The numbers exclude observers, if any. In case an SB member cannot join a meeting, he/she will at all times continue to receive the meeting materials to allow him/her to provide feedback prior to the meetings.

Please note that (i) Henk Breukink stepped down as of the end of the AGM on 23 April 2019. Mike Rees and Herna Verhagen were appointed as of the same moment. Although Herna Verhagen's appointment became effective on 1 October 2019, she already prepared for and participated in many Supervisory Board related meetings before this date as an observer.
Abbreviations used: SB = Supervisory Board; RiCo = Risk Committee; AC = Audit Committee; NCGcom = Nomination and Corporate Governance Committee, RemCo = Remuneration Committee

## Continuous dialogue with stakeholders

ING aims to maintain continuous interaction with customers, shareholders, employees, and our societal and other stakeholders. For the Supervisory Board the dialogue between ING and external supervisors was a standard agenda item throughout the year. This included a discussion on the results of the annual Supervisory Review and Evaluation Process (SREP) through which the European Central Bank aims to promote a resilient banking system as a prerequisite for a sustainable and sound financing of the economy. The SREP involves a comprehensive assessment of banks' strategies, processes and risks, and takes a forward-looking view to determine how much capital each bank needs to cover its risks.

The topic of managing ING's reputation and brand was also on the Supervisory Board agenda. The Supervisory board has had periodic conversations with various internal and external stakeholders and it exercised its oversight role to ensure that necessary actions resulting from this cascaded down into the organisation and were followed up, including those actions related to culture and behaviour. In addition, in 2019 extensive stakeholder consultation took place with among others customer, employee and shareholder representatives, external supervisors, society at large and other stakeholders in light of the proposed updates to the Executive Board and Supervisory Board remuneration policies which will be put to the vote at ING's 2020 Annual General Meeting.

Looking back at 2019 and given the ever increasing importance of what is happening in the world around us and the importance thereof to ING and its stakeholders, the Supervisory Board concluded that it would be beneficial to intensify the Supervisory Board's in-depth discussions on increasingly complex matters. To support this, the Supervisory Board worked with an advanced delivery of its meeting materials as from 2H 2019 onwards and it will extend its quarterly meetings by at least 25 percent as from next year. Additional meetings of the Risk Committee and the Audit Committee will be organised at the same time.

## SB and EB remuneration policy

The Supervisory Board intends to submit proposed new remuneration policies for the Executive Board and the Supervisory Board to the Annual General Meeting (AGM) of its shareholders in April 2020. This follows an extensive review of executive remuneration at ING, which was carried out in consultation with a broad range of stakeholders in 2019. It is also in line with the guidelines of the revised SRD II, which require listed companies to submit their remuneration policies to the AGM at least once every four years. The last year ING's remuneration policies were submitted in full to the AGM for approval was 2010.

As part of its review, the Supervisory Board held meaningful discussions with stakeholders to ensure the proposed remuneration approach achieves the right balance among their various viewpoints and interests. It also took into account public sentiment around remuneration. Shareholders will have the opportunity to cast a binding vote (≥ 75 percent) on the proposed new remuneration policies at the 2020 AGM. The policies aim to maintain a sustainable balance between the short and long-term interests of our stakeholders and build on ING's long-term responsibility towards customers, shareholders, employees, other stakeholders and society at large.

## ING's global KYC/AML priorities

On 4 September 2018, ING announced that it had reached a settlement agreement with Dutch authorities relating to an investigation that found serious shortcomings in the execution of customer due diligence and requirements related to fighting financial economic crime. Since the start of the investigation, various initiatives have been launched to further enhance AML/KYC throughout the bank. More broadly, ING has launched a bank-wide KYC enhancement programme, the progress of which is being monitored by and discussed between the Supervisory Board, management and the relevant supervisors.

As part of the aforementioned programme and also part of the Permanent Education session on KYC, the Supervisory Board visited ING's local and centralised compliance/KYC operations in Poland, Belgium, Slovakia and Romania in 2019, with additional visits in the pipeline for 2020. During these visits a dialogue takes place with the local teams, the results of which feed into the discussions at global level. The purpose of these local compliance/KYC visits was to provide the Supervisory Board members and the local organisation with a better mutual understanding of the importance of local initiatives and processes and how their results feed into the board discussions at the global level.

The Supervisory Board, Executive Board and Management Board Banking also discussed ING's internal KYC governance and processes. Improvements were identified that are now being implemented. The aforementioned boards reconfirmed their commitment to ensure ING fulfils its gatekeeper role, complies with applicable regulatory requirements and continue taking the necessary actions to strengthen compliance risk management and culture throughout the organisation.

## Appointment CFO

Following the settlement with the Dutch authorities in September 2018 and in consultation with the Supervisory Board, Koos Timmermans stepped down from his position as CFO and member of the Executive Board and Management Board Banking of ING after the presentation of the 2018 fourth quarter and full year results on 6 February 2019. He was succeeded by Tanate Phutrakul, who was appointed as CFO and member of the Management Board Banking effective 7 February 2019. The Supervisory Board nominated Tanate Phutrakul for appointment as a member of the Executive Board, subject to shareholder approval. The appointment was supported by 99.3 percent of shareholders at the Annual General Meeting on 23 April 2019 and was also approved by the European Central Bank.

## Appointment head of Market Leaders

Roland Boekhout stepped down as member of the Management Board Banking and head of Market Leaders on 11 July 2019 to become a member of the Board of managing directors with responsibility for the corporate clients segment at Commerzbank as of 1 January 2020. His board responsibilities for the Market Leaders segment were transferred to Ralph Hamers on an ad interim basis. Upon Supervisory Board approval and ECB approval, he was succeeded by Pinar Abay on 1 January 2020 as head of Market Leaders (also becoming a member of the Management Board Banking), taking up the responsibility for ING's operations in the Benelux.

## Permanent education and business visits

Permanent education and business visits are important for the members of the Supervisory Board as part of their continuous learning, aimed at maintaining their expertise at the required level and expanding it where necessary. They also help to keep up-to-date with and gain in-depth insight into the global and local economic, financial and political landscape and to increase the Supervisory Board's understanding of and engagement with ING's business operations and its stakeholders.

The annual Supervisory Board Knowledge Days, which took place in Amsterdam on 17 and 18 January 2019, were combined with regular Supervisory Board meetings and focused on compliance, AML/KYC, innovation and digitalisation, also including the concept of open banking.

As part of the annual business visit, the entire Supervisory Board, together with the Management Board Banking, visited the offices of ING in Slovakia and Romania in September 2019. This allowed the Supervisory Board to get a better understanding of local business challenges, with specific focus on AML/KYC and data security, as well as on sourcing including the role of ING's shared service centres.

Throughout the year, a number of other educational sessions on specific topics were organised for and at the request of the Supervisory Board. For 2019 a balance was sought between sessions focused on Compliance/KYC and other relevant topics, the latter including among others: the impact of low interest rates and mitigating measures, how to manage ING's reputation and brand, the platform business model, model risk management challenges, ICAAP, pricing and valuation adjustments to trading books, ING's credit rating in relation to the risk appetite framework, risk management of innovation, information security and anti-fraud, the Organisational Health Index, talent management and talent-to-value, and performance management and remuneration practices.

These visits and educational sessions provided ample opportunities for Supervisory Board members to interact with senior management and employees on location and to interact with senior management in dedicated speed-meet sessions. Such interaction contributes to a better mutual understanding and alignment on what matters most to ING, both for its employees and for the Supervisory Board. As in previous years, the Supervisory Board will continue this practice.

## Strategy based on long-term value creation

In 2019, ING continued to implement its Think Forward strategy focused on long-term value creation and guided by our purpose to empower people to stay a step ahead in life and in business. In late 2016, ING announced the acceleration of the implementation of the Think Forward strategy, focusing on investing in our digital transformation and creating a scalable banking platform. A global transformation programme was approved to realise the acceleration of the strategy. The basic starting point of the programme was ING's value proposition, captured in multiple workstreams across the ING network.

Throughout 2019, the Supervisory Board monitored and discussed the progress of the strategy and its transformation and, as part of this, had an active dialogue with the Executive Board and the Management Board Banking. In general ING is progressing well on the delivery of structural savings, despite the impact of an increase in programmes to comply with key regulatory requirements.

ING's strategy, together with the transformation programmes, includes an overarching view on our transformation into a dynamic digital player. Underlying that are initiatives to further improve our differentiating customer experience, earn primary customers, develop analytical skills to understand our customers better, increase the pace of innovation to serve changing customer needs, enhance efficiency, and think beyond traditional banking to develop new services and business models while growing our lending capabilities.

Our plans to become a go-to platform for customers' financial needs, to participate on others' platforms and to develop independent initiatives in partnership with others will drive our opportunities. To continue unlocking the value embedded in our platform in a fast-changing world, ING identified six key accelerators, which were shared with investors during ING's Investor Day on 25 March 2019: growing primary customers, increasing cross-buy through our own products or those of our partners, improving cross-border scalability, faster time to volume, benefiting from an attractive funding and lending mix, and leveraging our sustainability profile.

Driving and delivering commercial momentum is also dependent on how we fund and manage the transformation and manage (non-financial) risk. This is being discussed between the Supervisory Board and management during periodic meetings, which in 2019 also included a dedicated Strategy Day. The Supervisory Board acknowledges it is important to take into account the duty of care towards those stakeholders of the bank who may be impacted by the transition.

## Financial and risk reporting

The Executive Board has prepared the financial statements and discussed these with the Supervisory Board, including the SOX 404 Report in relation to our Annual Report on Form 20-F. ING's Annual Report is presented on integrated form for the fifth successive year. The financial statements will be submitted for adoption at the 2020 Annual General Meeting as part of the 2019 Annual Report.

At the Annual General Meeting held on 23 April 2019 ING's proposal to pay a final dividend of €0.68 per share over the previous reporting year was approved. The proposal was based on ING being ahead of prevailing fully-loaded (capital) requirements and being well positioned for future regulatory uncertainties.

In 2019, quarterly results, including the relevant auditor reports and press releases, were discussed and approved in January, May, July and October. The full-year 2018 financial results were discussed and approved in March 2019. Also discussed were the payment of an interim 2019 dividend of €0.24 per ordinary share, which was declared on 6 August 2019. In addition, elements of the draft agenda for the 2020 Annual General Meeting were discussed and approved.

The Supervisory Board approved the annual review of the risk appetite framework that reflects recent changes in regulatory requirements. Per standard practice, the Supervisory Board was informed in detail throughout the year of the potential financial and non-financial risks for ING, including updates on upcoming regulatory changes (such as Basel IV) and political and economic developments in various countries and regions, and discussed how these could best be mitigated.

KPMG was appointed as external auditor of ING Group for the financial years 2016 to 2019 (inclusive) by the 2015 Annual General Meeting. The 2019 Annual General Meeting reappointed KPMG for the audit of the financial statements for a subsequent four years (2020 to 2023 inclusive). KPMG, in its role as ING's external auditor, audited ING's 2019 accounts and financial statements. As part of the standard procedures, KPMG declared itself independent from ING, in compliance with applicable rules and regulations. Based on the Audit Committee proposal, the Supervisory Board supported the audit plans of the internal and external auditor, the latter including the scope and materiality of the external audit. There has been a significant increase in regulatory reporting since the start of ECB supervision. Reporting timelines are strict and the granularity of the data being requested has increased. In addition, local requirements need to be met. ING aims to safeguard data quality and all reporting processes so these remain up to standard.

## Internal Supervisory Board meetings

During the internal meetings of the Supervisory Board in 2019 (with the CEO in attendance, except when the annual self-evaluation of the Supervisory Board or matters concerning the CEO were discussed), the Executive Board and Management Board Banking performance assessments were discussed and approved. Furthermore the Executive Board and Management Board Banking annual targets were reviewed and approved. The future composition of the Executive Board, the Management Board Banking (including the new head of Market Leaders) and the Supervisory Board, its committees and potential candidates were recurring topics of discussion in light of various developments. ING's talent and succession planning were also discussed, including the outcome of the Annual Talent Review. Remuneration was another recurring agenda item.

The Supervisory Board self-assessment was also on the agenda. Last year's action points were addressed during the year, covering: (1) increased efforts to improve stakeholder management, by means of for example having participated in several roadshows and sector round tables, and foremost through the stakeholder dialogue that was initiated in view of the upcoming new proposed remuneration policies for the Executive Board and Supervisory Board; (2) an improved balance between the focus on performance management and compliance, through renewed reports and dashboards that include priorities, milestones and metrics; (3) more in-depth educational sessions, with a clear balance between the focus on risk, KYC and compliance (including on-site visits to ING's local KYC/compliance operations) and other areas of importance; and (4) an enhanced meeting practice, with advanced delivery timelines and additional regular meetings.

As in previous years, the Supervisory Board also conducted its annual self-assessment over this reporting year, facilitated by an independent external party and with input from several executives who regularly interact with the Supervisory Board and attend Supervisory Board meetings. The self-assessment has been made more comprehensive by specifically addressing the 'what' (roles and responsibilities) and the 'how' (culture and behaviour). We believe this also better aligns with developments among external stakeholders' and their expectations.

The performance of the Supervisory Board and its committees was considered to have improved compared to previous year's self-assessment, taking into account that the environment in which ING and the Supervisory Board are operating is now even more complex and challenging than before. The Supervisory Board will therefore continue to closely monitor and assess developments in the areas of financial and non-financial risk, compliance and internal control, as well as in the regulatory and external supervision landscape.

The Supervisory Board's spearhead objectives for 2020 will be to continue strengthening stakeholder dialogue and focusing on ING's longer-term strategic ambition and how to make AML/compliance an integral part of this. In this regard, the Supervisory Board will constructively challenge and support the Executive Board and the Management Board Banking to enable more clearly set expectations on prioritisation and milestones.

Following the discussions in early 2020 on the 2019 annual self-assessment results, a number of suggestions were made as key priorities to contribute to the performance of the Supervisory Board over the coming year. These include achieving more focused Supervisory Board (committee) plenary meetings by rethinking the meeting approach and set-up, potentially enhancing them with deep dives and thematic sessions. The Supervisory Board will also enhance its lifelong learning. In addition to participating in the annual plenary permanent education sessions that will be more specifically linked to ING's key themes, priorities and challenges, the Supervisory Board members will additionally take in knowledge on specific topics, for example via written public and already existing ING reports of the Executive Board and Management Board Banking.

## Audit Committee meetings

The Audit Committee met five times in 2019. On average, 96 percent of the members were present at the scheduled meetings. The Audit Committee discussed the quarterly results, the interim accounts and the financial statements. Key audit matters, as included in the auditors' reports, were also a topic of discussion.

In addition to financial results and accounts, the Audit Committee's regular deliberations included financial reporting, the external auditor's audit plan, engagement letter, independence and fees, the overall internal control environment, the internal controls over financial reporting, the internal and external auditor reports, review of the internal audit function, and matters related to the financing of the company, including the assessment of ING's capital and liquidity position. The Audit Committee also reviewed the press releases related to the periodic results, the Annual Report, the 6-K and 20-F forms and the SOX 404 Report, and discussed and made recommendations for the approval of the internal audit plan.

Specific attention was paid to a variety of other, related topics. These included generic IFRS-related developments and their potential impact on our disclosures, legal proceedings, the impact of the transition from EONIA to €str, assessment of the internal audit function, the remediation of open-control deficiencies in areas including loan-loss provisioning and user access and change management. Also addressed were non-financial risks relevant for financial reporting. High and critical overdue issues, as reported by the internal audit function, were also discussed. The updated internal audit charter and the quarterly whistleblower report were also areas of attention. The Audit Committee performed a thorough assessment of the functioning of the external auditor and the scope and materiality of the audit plan and the principal risks identified in the audit plan. All relevant items discussed by the Audit Committee were reported to the Supervisory Board, with the Supervisory Board approving those items as required from a governance perspective. Directly following the Audit Committee meetings, the members of the Audit Committee met with the internal and external auditors to seek confirmation that all relevant topics were discussed in the Audit Committee meetings.

To properly prepare for the regular Audit Committee meetings, the chairman of the Audit Committee held separate sessions with the external auditor, the general manager of the internal audit department, the CFO and the Group Controller. He also met with various senior managers.

## Risk Committee meetings

The Risk Committee met eight times in 2019. On average, 93 percent of the members were present at the scheduled meetings. As with the meetings of the other committees, all relevant items discussed by the Risk Committee were reported to the Supervisory Board, with the Supervisory Board approving those items as required from a governance perspective. In each quarterly Risk Committee meeting financial and model risk as well as non-financial and compliance risk reports were discussed, including the status of ING's accompanying metrics, with regard to solvency, liquidity and funding, credit, country, market, IT, non-financial and compliance risks. The non-financial and compliance risk discussions were supported by updates of the bank-wide know your customer enhancement programme, on IT and various compliance dashboards (on KYC, GDPR/GDPP, PSD2, MiFID II, sourcing and data quality) and implementation of related regulatory programmes.

In 2019 the Risk Committee also discussed the annual review of the Risk Appetite Framework and statements, the updated Recovery Plan and stress-testing scenarios, as well as the impact of upcoming regulations such as Basel IV. Enterprise risk management, credit developments in certain countries and portfolios, the investor protection and markets policy and ING's new global code of conduct were also on the agenda. As in 2018, the Risk committee held an additional meeting to allow it to deal with high-priority issues such as the risks related to ING's sourcing activities. The Risk Committee's feedback is also brought to bear on discussions regarding remuneration practices. It considers the implications of proposed new remuneration policies for the Executive Board and the Supervisory Board and the Variable Remuneration Accrual Model, which was introduced in 2018 (see also 'Remuneration Committee meetings' in this section).

While transforming its organisation, ING needs to ensure that integrity continues to come first and that critical non-financial risk areas stay top of mind, because this is an integral part of who we are. We need to build up strong foundations with structural solutions that continue to earn the trust of our customers and society at large.

Read more in the 'Developments in risk and capital management' chapter and the 'Risk Management' section.

## Nomination and Corporate Governance Committee meetings

The Nomination and Corporate Governance Committee met 13 times in 2019. On average, 91 percent of the members were present at the scheduled meetings.

The Nomination and Corporate Governance Committee discussed the medium- to longer-term succession planning for the Executive Board (including the new CFO), the Management Board Banking (including the new Head of Market Leaders) and the Supervisory Board. With regard to Supervisory Board succession planning, the Nomination and Corporate Governance Committee continued its search for potential suitable successors so as to maintain a balanced Supervisory Board composition, taking into account the evolving role of supervisory boards in general.

Finding suitable candidates remains challenging, as numerous requirements must be met to enhance the composition of the Supervisory Board including regulatory requirements, diversity, banking and other industry knowledge, outside positions, independence, no conflicts of interest, availability, etc. Diversity-related aspects that are being taken into account, include the minimum and optimal size of a supervisory board and how to arrive at an appropriate balance in its representation of regions, age, gender, and financial and generalist expertise. The Nomination and Corporate Governance Committee also has a continuing conversation on Executive Board and Management Board Banking succession planning as part of its regular meetings by means of deep dives by function and business line. Please refer to ING's diversity and competence matrix that shows the current composition of the Executive Board, Management Board Banking and Supervisory Board (see the 'Diversity and Competence Matrix' in this chapter).

In addition the Nomination and Corporate Governance Committee focused on improving diversity at the higher management levels, supported by senior management succession planning and accelerating refreshment. Time was spent on the role requirements and succession of several senior management roles that have a direct reporting line to the boards, such as the chief compliance officer, the general manager of the internal audit function, the general counsel and the chief HR officer. Talented individuals are being identified internally who are considered to have the potential to assume more senior and complex roles in the organisation over time, also taking into account ING's diversity policy (70 percent principle for mixed-teams) as published on www.ing.com. As was the case last year, periodic conversations with them took place outside regular meetings.

In terms of corporate governance, the committee discussed the agenda for the 2019 Annual General Meeting, including the publication of the booklet on ING's application of the Dutch Corporate Governance Code, the Dutch Banking Code and further implementation of the renewed EBA guidelines on Internal Governance. During the year, the committee also discussed the 2019 Annual General Meeting voting against discharge of the corporate boards, its implications and how to take this further going forward; the Winning Performance Culture results over 2018 (the employee engagement survey we hold every two years, alternating with an organisational health survey in the years in between) and related attention points for the future; and the development and implementation of a global suitability policy framework that brings together several already existing policies and procedures, sets out clear criteria and a process for assessment and re-assessment of governing bodies and key function holders in scope. Standard topics on the committee's agenda also included the annual review and update of the corporate board charters.

All relevant items discussed by the committee were reported to the Supervisory Board, with the Supervisory Board approving those items as required from a governance perspective.

## Remuneration Committee meetings

In 2019, the Remuneration Committee met 10 times. On average, 97 percent of the members were present at the scheduled meetings. Regular and additional meeting have taken place in view of the development of the proposed remuneration policies for the Executive Board and Supervisory Board and the related stakeholder engagement plan.

The Remuneration Committee, where necessary with input and advice from the Risk Committee following strengthened risk management governance, reviewed the predefined thresholds above which the pool for variable remuneration may be unlocked for those eligible. The committee discussed the variable remuneration pool and reviewed the performance assessment for the Executive Board and Management Board Banking, as well as the individual variable remuneration proposals. Following the settlement with the Dutch authorities in September 2018, it was agreed that the Executive Board and Management Board Banking would forego their variable pay over 2018. It was also decided to considerably cut the bonus pool for the rest of the organisation, resulting in a significant reduction of the total bonus rewarded over 2018.

In view of the new SRD II requirements, which will become effective as per 1 January 2020, the Remuneration Committee discussed and prepared proposed new remuneration policies for the Executive Board and the Supervisory Board in consultation with the Risk Committee and taking into account the feedback obtained from extensive stakeholder consultation. The proposed policies are subject to approval by the Annual General Meeting of April 2020. For further details, see the 'Remuneration report' in this Annual Report.

The Remuneration Committee also reviewed the remuneration proposals pertaining to the preceding performance year for Identified Staff, including potential cases for holdback of deferred compensation by way of malus. In addition, the proposed annual targets for the Executive Board and the Management Board Banking members were discussed and the ING Bank Remuneration Regulations Framework was updated as part of an annual review, including the Variable Remuneration Accrual Model. Throughout the year the Remuneration Committee approved Identified Staff and High Earner-related remuneration matters, based on ING's accompanying governance framework.

## Composition of the Executive Board, Management Board Banking and Supervisory Board

At the Annual General Meeting on 23 April 2019, Mariana Gheorghe was reappointed as Supervisory Board member. Henk Breukink stepped down as Supervisory Board member and chairman of the Remuneration Committee as per the end of the 2019 Annual General Meeting, having completed the maximum allowed regulatory term. Mike Rees and Herna Verhagen were appointed as Supervisory Board members. Mike Rees' membership became effective as per the end of the 2019 Annual General Meeting and he then also became a member of the Risk Committee. Herna Verhagen's membership became effective as of 1 October 2019. In between the end of the 2019

Annual General Meeting and 1 October 2019 she was already present at various Supervisory Board related meetings as an observer, including at the meetings of the Remuneration Committee of which she became the chairman as of 1 October 2019. As per that date she also became a member of the Nomination and Corporate Governance Committee. Mariana Gheorghe fulfilled the chairman role of the Remuneration committee on an interim basis in the period after the Annual General Meeting until 1 October 2019, after which she also remained a member of the Remuneration Committee.

After seven years of dedicated service, Robert Reibestein, also chairman of the Risk Committee and a member of the Audit Committee and the Remuneration Committee, decided in 4Q 2019 to step down from the Supervisory Board per 1 January 2020, because of persistent personal health issues. As from that date Mike Rees has taken over the role of chairman of the Risk Committee.

The Nomination and Corporate Governance Committee and the Supervisory Board will continue to strive for an adequate and balanced composition of the Supervisory Board when selecting and nominating new members for appointment, taking into account ING's diversity policy and other factors. Read more in the 'Corporate governance' chapter on the composition of the Supervisory Board committees at year-end 2019.

The members of the Supervisory Board are requested to assess annually whether or not they are independent as set out in the Corporate Governance Code and to confirm this in writing. On the basis of these criteria, all members of the Supervisory Board, with the exception of Eric Boyer de la Giroday, are to be regarded as independent on 31 December 2019. Eric Boyer de la Giroday is considered not independent because of his position as chairman of the Board of Directors of ING Belgium S.A./N.V. and his former positions as member of the Executive Board of ING Groep N.V. and vice-chairman of the Management Board Banking of ING Bank N.V. On the basis of the NYSE listing standards, all members of the Supervisory Board are to be regarded as independent.

On 7 February 2019 Tanate Phutrakul was appointed as CFO and member of the Management Board Banking, succeeding Koos Timmermans. The Supervisory Board nominated Tanate Phutrakul for appointment as a member of the Executive Board of ING Group, which was subsequently approved by the Annual General Meeting on 23 April 2019. These appointments and the appointments of Mike Rees and Herna Verhagen have been approved by the European Central Bank.

# Diversity and competence matrix

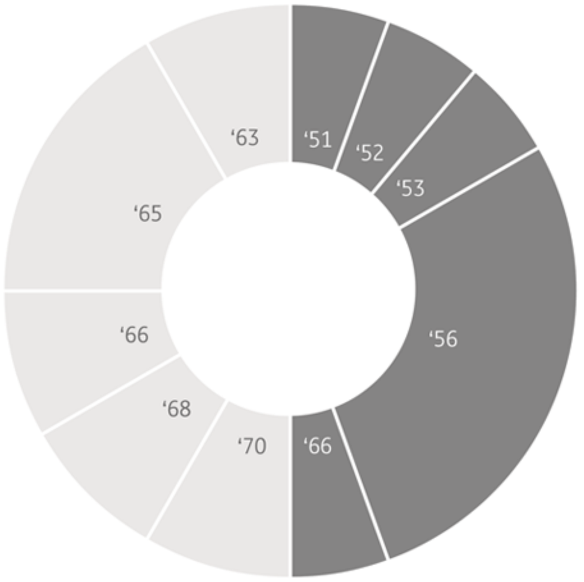
## Management Board

| Competencies | Ralph Hamers (EB/MBB) NL 1966 | Tanate Phutrakul (EB/MBB) TH 1965 | Steven van Rijswijk (EB/MBB) NL 1970 | Aris Bogdaneris (MBB) CA 1963 | Isabel Fernandez (MBB) ES 1968 | Roel Louwhoff (MBB) NL 1965 |
|---|---|---|---|---|---|---|
| Executive experience | ■■ | ■■ | ■■ | ■■ | ■■ | ■■ |
| International experience | ■■ | ■■ | ■ | ■■ | ■■ | ■■ |
| Banking/Finance/Audit/Risk | ■■ | ■■ | ■■ | ■■ | ■■ | ■ |
| Operations a/o IT | ■ | ■■ | ■■ | ■■ | ■ | ■■ |
| Corporate governance | ■■ | ■ | ■■ | ■ | ■ | ■ |

■ some generic to average experience in the area
■■ (had been) accountable and (had) executed over several years

## Supervisory Board

| | Hans Wijers (chair) NL 1951 | Hermann-Josef Lamberti (vice-chair) DE 1956 | Jan Peter Balkenende NL 1956 | Eric Boyer de la Giroday BE 1952 | Mariana Gheorghe RO/UK 1956 | Margarete Haase AT 1953 | Mike Rees UK 1956 | Robert Reibestein NL 1956 | Herna Verhager NL 1966 |
|---|---|---|---|---|---|---|---|---|---|
| Executive experience | ■■ | ■■ | ■ | ■■ | ■■ | ■■ | ■■ | ■ | ■■ |
| International experience | ■■ | ■■ | ■■ | ■ | ■■ | ■■ | ■■ | ■■ | ■ |
| Banking/Finance/Audit/Risk | ■ | ■■ | ■ | ■■ | ■■ | ■■ | ■■ | ■■ | ■ |
| Operations a/o IT | ■■ | ■■ | ■ | ■ | ■ | ■ | ■■ | ■ | ■■ |
| Corporate governance | ■■ | ■ | ■■ | ■■ | ■■ | ■■ | ■■ | ■ | ■■ |




**Age spread**
Management Board
Supervisory Board

Information as at 31 December 2019. Please note the following: the competencies included in this matrix represent a non-exhaustive overview of the competencies of ING's corporate board members that they already had before joining ING and/or developed during their position(s) at ING. The purpose of this matrix is to provide ING's stakeholders with an overview on the main competencies ING considers to be the most relevant for its stakeholders. As ING's situation, markets and environment are subject to continuous change, the contents of the matrix is subject to change as well. Furthermore, for the appointments of new corporate board members, all relevant competencies are also shared with the DNB/ECB based on their Suitability Matrix to assess the collective competence of members of the members of the management/supervisory body.

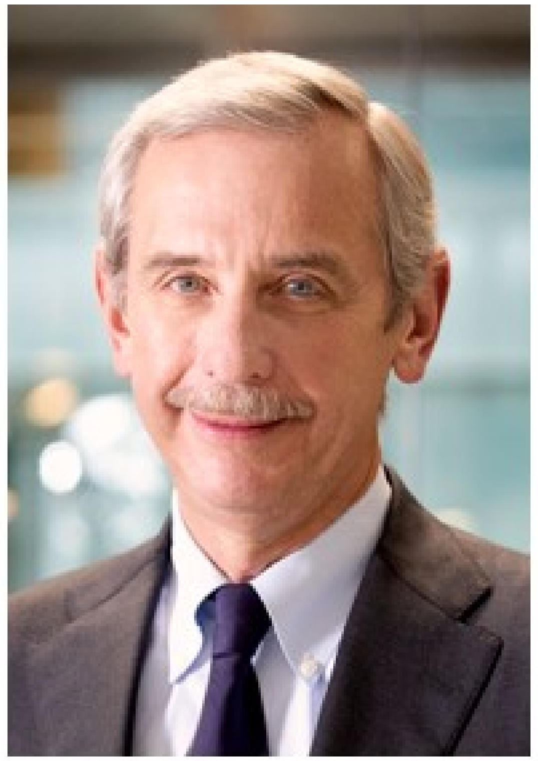
## The Supervisory Board

The Supervisory Board of ING Group is responsible for controlling management performance and advising, supervising and constructively challenging the Executive Board. All Supervisory Board members, with the exception of not more than one person, shall qualify as independent as defined in the best practice provision 2.1.8 of the Dutch Corporate Governance Code. Under this code, Eric Boyer de la Giroday is considered not to be independent. The current members of the Supervisory Board are:

Hans Wijers
Chairman Supervisory Board

Hermann-Josef Lamberti
Vice-chairman Supervisory Board

Jan Peter Balkenende



Eric Boyer de la Giroday

Mariana Gheorghe

Margarete Haase

Mike Rees

Herna Verhagen

## Appreciation for the Executive Board, Management Board Banking and ING employees

The Supervisory Board would like to thank the members of the Executive Board and the Management Board Banking for their hard work in 2019. Important milestones were the further steps taken towards creating an open banking platform for customers, further digitalising our offering and other innovative achievements such as the integration of Apple Pay for our retail customers. The Supervisory Board would also like to thank all ING employees for their contribution in realising these achievements and for continuing to serve the interests of customers, shareholders and other stakeholders of ING. The Supervisory Board is fully aware that ING is still going through a challenging period with economic crime and regulatory programmes, and would therefore also like to thank everyone for their efforts to regain the trust of our customers and other stakeholders.

### Additional information

More information can be found in the 'Corporate governance' chapter and the 'Remuneration report' chapter, which are deemed to be incorporated by reference here.

Amsterdam, 2 March 2020

# Corporate governance

This chapter reports on the application of the Dutch Corporate Governance Code effective as from 1 January 2017, by ING Groep N.V. ('ING Group'), including information on ING's share capital, control, Executive Board, Supervisory Board and external auditor.

This chapter, including the parts of this Annual Report incorporated by reference, with the separate publication 'ING's application of the Dutch Corporate Governance Code' dated 2 March 2020 (see www.ing.com), together comprise the 'corporate governance statement' as specified in section 2a of the decree with respect to the contents of the Annual Report ('Besluit inhoud bestuursverslag')[1]

## Dutch Corporate Governance Code

### Compliance with the Dutch Corporate Governance Code

ING Group uses the Dutch Corporate Governance Code as reference for its corporate governance structure and practices.

The Dutch Corporate Governance Code can be downloaded from the website of the Dutch Corporate Governance Code Monitoring Committee www.commissiecorporategovernance.nl.

ING's application of the Dutch Corporate Governance Code is described in the 2019 publication ING's application of the Dutch Corporate Governance Code, available on the website of ING Group. This is to be read in conjunction with this chapter and is deemed to be incorporated into this chapter.

### Dutch Banking Code

The Dutch Banking Code ('Banking Code'), a revised version of which was adopted by the Dutch Banking Association in 2014, is applicable only to ING Bank N.V. and not to ING Group. The Banking Code can be downloaded from the website of the Dutch Banking Association (www.nvb.nl). Its application by ING Bank is described in 'Application of the Dutch Banking Code by ING Bank N.V.', available on ING Group's website. ING Group voluntarily applies the principles of the Banking Code regarding remuneration of the members of its Executive Board. ING Group's remuneration policy for the Executive Board and senior management is compliant with the Banking Code principles.

### Differences between Dutch and US corporate governance practices

ING Groep N.V. is a public limited liability company (*naamloze vennootschap*) organised under the laws of the Netherlands and qualifies as a foreign private issuer under SEC rules and for the purposes of the New York Stock Exchange ('NYSE') listing standards. Under NYSE listing standards, listed companies that are foreign private issuers are permitted to follow home-country practice in some circumstances in lieu of the provisions of the corporate governance rules contained in Section 303A of the NYSE Listed Company Manual that are applicable to US listed companies. In accordance with the requirements of the SEC and NYSE, ING Group must disclose in its Annual Report on Form 20-F any significant differences between its corporate governance practices and those applicable to US companies under NYSE listing standards. ING Group believes the following to be the significant differences between its corporate governance practices and the NYSE corporate governance rules applicable to US companies:

- ING Group has a two-tier board structure, in contrast to the one-tier board structure used by most US companies. In the Netherlands, a public limited liability company with a two-tier board structure has an executive board as its management body and a supervisory board that advises

[1] Dutch Bulletin of Acts (Staatsblad) 2004, 747, most recently amended with effect from 1 January 2018: Dutch Bulletin of Acts 2017, 332

and supervises the executive board. Supervisory board members are often former state or business leaders and sometimes former members of the executive board. A member of the executive board or other officer or employee of the company cannot simultaneously be a member of the supervisory board. The supervisory board must approve specified decisions of the executive board.

- NYSE listing standards generally require that a majority of board members be 'independent' as determined under the NYSE listing standards. Under the Corporate Governance Code, all members of the supervisory board, with the exception of not more than one person, should be 'independent' as determined under the Corporate Governance Code. However, the definition of 'independent' under the Corporate Governance Code differs in its details from the definition of 'independent' under the NYSE listing standards. In some cases, Dutch requirements are stricter; in other cases the NYSE listing standards are stricter. All members of the Supervisory Board, other than Eric Boyer de la Giroday, are independent as determined under the Corporate Governance Code.

- NYSE listing standards require a US company to have a compensation committee and a nominating/corporate governance committee, each composed entirely of independent directors. The Nomination and Corporate Governance Committee and Remuneration Committee are composed entirely of members of the Supervisory Board who are independent as determined under the Corporate Governance Code.

- NYSE listing standards require that, when a member of the audit committee of a US company serves on four or more audit committees of public companies, the company should disclose (either on its website or in its annual proxy statement or annual report filed with the SEC) that the board of directors has determined that this simultaneous service would not impair the director's service to the company. Dutch law does not require the Supervisory Board to make such a determination.

- In contrast to the NYSE listing standards, the Corporate Governance Code contains an 'apply-or explain' principle, offering the possibility of deviating from the Corporate Governance Code. For any deviations by ING Group, please refer to the paragraph 'Compliance with the Dutch Corporate Governance Code'

- NYSE listing standards applicable to US companies require that external auditors be appointed by the audit committee. By contrast, Dutch law requires that ING Group's external auditors be appointed by the General Meeting and not by the Audit Committee. The Audit Committee is responsible for preparing the Supervisory Board's nomination to the General Meeting for the appointment and remuneration of the Group's external auditor, and annually evaluates the independence and functioning of, and the developments in the relationship with, the Group's external auditor and informs the Supervisory Board of its findings and proposed measures.

- The Articles of Association provide that there are no quorum requirements to hold a General Meeting, although certain shareholder actions and certain resolutions may require a quorum.

- Under NYSE listing standards, shareholders of US companies must be given the opportunity to vote on all equity compensation plans and to approve material revisions to those plans, with limited exceptions set forth in the NYSE rules. The NYSE rules require a shareholder vote on all equity compensation plans applicable to any employee, director or other service provider of a company. The results of such votes are advisory in nature rather than binding. Under Dutch law and the Corporate Governance Code, binding shareholder approval is only required for equity compensation plans (or changes thereto) for members of the executive board and supervisory board, and not for equity compensation plans for other groups of employees.

# Capital

## Capital Structure

The authorised capital of ING Group consists of ordinary shares and cumulative preference shares. Currently, only ordinary shares are issued, while a call option to acquire cumulative preference shares has been granted to ING Continuity Foundation (Stichting Continuïteit ING). The acquisition of cumulative preference shares pursuant to the call option is subject to the restriction that, immediately after the issuance of cumulative preference shares, the total amount of cumulative preference shares outstanding may not exceed one third of the total issued share capital of ING Group (see Report of the ING Continuity Foundation chapter). The purpose of this call option is to protect the independence, continuity and identity of ING Group against influences that are contrary to the interests of ING Group, its enterprise and the enterprises of its subsidiaries and all stakeholders (including, but not limited to, hostile takeovers). However, the ordinary shares are not used for protective purposes.

The board of ING Continuity Foundation comprises four members who are independent of ING Group. No (former) Executive Board member, (former) Supervisory Board member, (former) ING Group employee or (former) permanent adviser to ING Group is on the board of the ING Continuity Foundation. The board of the ING Continuity Foundation appoints its own members, after consultation with the Supervisory Board of ING Group, but without any requirement for approval by ING Group.

Read more in the 'Report of the ING Continuity Foundation' chapter.

ING Group's authorised capital is the maximum amount of capital allowed to be issued under the terms of the Articles of Association. New shares in excess of this amount can only be issued if the Articles of Association are amended. For reasons of flexibility and to meet the requirement as set forth in the Bank Resolution and Recovery Directive ('BRRD') that the amount of authorised share capital should at all times be sufficient to permit the issuance of as many ordinary shares as required for a potential future bail-in, ING Group seeks to set the authorised capital in the Articles of Association at the highest level permitted by law, which is five times the actually issued share capital.

## Issuance of shares

Share issuances are decided by the General Meeting, which may also delegate its authority. Each year, a proposal is made to the General Meeting to delegate authority to the Executive Board to issue new ordinary shares or to grant rights to subscribe to new ordinary shares, both with and without pre-emptive rights for existing shareholders.

The set-up and content of the currently applicable share issue authorisation have been discussed with many investors, proxy advisors and other stakeholders in the context of the corporate governance review of 2016 and in the annual general meetings of 2016 and subsequent years; their feedback has been taken into account. It enables the Executive Board to issue new ordinary shares (including the granting of rights to subscribe for ordinary shares, such as warrants or in connection with convertible debt instruments) for a period of 18 months, ending on 23 October 2020 subject to the following conditions and limits:

- No more than 40 percent of the issued share capital in connection with a rights issue, being a share offering to all shareholders in proportion to their existing holdings of ordinary shares as nearly as may be practical. However, the Executive Board and Supervisory Board may exclude certain shareholders from such a share offering for practical or legal reasons such as record dates, fractional entitlements, treasury shares, applicable legal restrictions on share offerings or in the context of a syndicated rights issue; plus
- No more than 10 percent of the issued share capital, with or without pre-emptive rights of existing shareholders.

Specific approval by the General Meeting is required for any share issuance exceeding these limits.

As explained at the start of this paragraph, the purpose of this share issue authorisation is to delegate the power to issue new ordinary shares to the Executive Board. Accordingly, the Executive Board is authorised to issue new ordinary shares without first having to obtain the consent of the General Meeting, which in the Netherlands is subject to a statutory convocation period of at least 42 days. This authorisation gives ING Group flexibility in managing its capital resources, including regulatory capital, while taking into account shareholders' interests to prevent dilution of their shares. It particularly enables ING Group to respond promptly to developments in the financial markets, should circumstances so require. The Executive Board and the Supervisory Board consider it in the best interest of ING Group to have the flexibility this authorisation provides.

This authorisation may be used for any purpose, including but not limited to strengthening capital, financing, mergers or acquisitions. However, the authorisation to issue ordinary shares by way of rights issue cannot be used for mergers or acquisitions on a stock-for-stock basis as this is incompatible with the concept of pre-emptive rights for existing shareholders.

In line with market practice, ING Group currently intends to include the following categories of shareholders in such a rights issue:
1. Qualified investors as well as retail investors in the Netherlands and the US (SEC registered offering);
2 Qualified investors in EU member states;
3. Retail investors in EU member states where ING has a significant retail investor base, provided that it is feasible to meet local requirements (in ING's 2009 rights offering, shares were offered to existing shareholders in Belgium, France, Germany, Luxembourg, Spain and the UK, where ING believed the vast majority of retail investors were located at that time);
4. Qualified or institutional investors in Canada and Australia.

Retail investors in Canada and Australia and investors in Japan will not be included in such a share offering.

Shareholders who are not allowed to, do not elect to, or are unable to subscribe to a rights offering, are entitled to sell their rights in the market or receive any net financial benefit upon completion of a rump offering after the exercise period has ended.

The share issue authorisation that will be proposed to the 2020 Annual General Meeting will be similar to the currently applicable authorisation described above.

## Transfer of shares and transfer restrictions

Shares not included in the Securities Giro Transfer system (*Wet Giraal Effectenverkeer* system) are transferred by means of a deed of transfer between the transferor and the transferee. To become effective, ING Group has to acknowledge the transfer, unless ING Group itself is a party to the transfer. The Articles of Association do not restrict the transfer of ordinary shares, whereas the transfer of cumulative preference shares is subject to prior approval of the Executive Board. ING Group is not aware of the existence of any agreement pursuant to which the transfer of ordinary shares or American depositary receipts for such shares is restricted.

Shares that are included in the Securities Giro Transfer system are transferred in accordance with the Securities Giro Transfer Act (*Wet Giraal Effectenverkeer*). A shareholder, who wishes to transfer such shares, must instruct the securities intermediary where his shares are administered accordingly.

## Repurchase of shares

ING Group may repurchase issued shares. Although the power to repurchase shares is vested in the Executive Board subject to the approval of the Supervisory Board, prior authorisation from the General Meeting is required for these repurchases. Under Dutch law, this authorisation lapses after 18 months. Each year, a proposal is made to the General Meeting to authorise the repurchase of shares by the Executive Board for a period of 18 months.

Pursuant to this authorisation, no more than 10 percent of ING Group's share capital may be held as treasury shares. When repurchasing shares, the Executive Board must observe the price ranges prescribed in the authorisation. For the ordinary shares, the authorisation currently in force stipulates a minimum price of one eurocent and a maximum price equal to the highest stock price on the Amsterdam stock exchange on the date on which the purchase agreement is concluded or on the preceding day of stock market trading.

## Special rights of control

No special rights of control referred to in Article 10 of the directive of the European Parliament and the Council on takeover bids (2004/25/EC) are attached to any share.

## Obligations of shareholders to disclose holdings

Pursuant to section 5.3 of the Dutch Financial Supervision Act ('Major Holdings Rules') ), any person who, directly or indirectly, acquires or disposes of an interest in the voting rights and/or the capital of (in short) a public limited company incorporated under the laws of the Netherlands with an official listing on a stock exchange within the European Economic Area, as result of which acquisition or disposal the percentage of voting rights or capital interest, whether through ownership of ordinary shares, American depositary receipts (ADRs) or any other financial instrument, whether stock-settled or cash-settled, such as call or put options, warrants, swaps or any other similar contract, reaches, exceeds or falls below 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% or 95%. With respect to ING, the Major Holdings Rules would require any person whose interest in the voting rights and/or capital of ING reached, exceed or fell below those percentage interests, whether through ownership of ordinary shares, ADSs or any other financial instruments whether stock settled or cash settled, such as call or put options, warrants, swaps or any other contract to notify in writing the Dutch Authority for the Financial Markets (*Autoriteit Financiële Markten* - AFM) immediately after the acquisition or disposal of the triggering interest in ING Group's share capital.

A notification requirement also applies if a person's capital interest or voting rights reaches, exceeds or falls below the above-mentioned thresholds as a result of a change in ING's total issued share capital or voting rights. Such notification must be made no later than the fourth trading day after the Dutch Authority for the Financial Markets has published ING's notification of the change in its issued share capital.

The notification will be recorded in a public register that is held by the Dutch Authority for the Financial Markets and published on its website.

Details of investors, if any, who have reported their interest in ING Group pursuant to the Dutch Financial Supervision Act (or the predecessor of this legislation), are shown in the 'ING shares' chapter.

Non-compliance with the obligations of the Major Holdings Rules can lead to criminal prosecution or administrative law sanctions. In addition, a civil court can issue orders against any person who fails to notify or incorrectly notifies the Dutch Authority for the Financial Markets, in accordance with the Major Holdings Rules, including suspension of the voting right in respect of such person's ordinary shares.

ING Group is not aware of any investors (or potential shareholders) with an interest of three percent or more in ING Group other than those shown in the 'ING shares' chapter as per year-end 2019.

Each person holding a gross short position in relation to the issued share capital of ING that reaches, exceeds or falls below any one of the above-mentioned thresholds must immediately give written notice to the AFM. If a person's gross short position reaches, exceeds or falls below one of the above-mentioned thresholds as a result of a change in ING's issued share capital, such person must make a notification not later than the fourth trading day after the AFM has published the Company's notification in the public register of the AFM.

In addition, pursuant to Regulation (EU) no. 236/2012 of the European Parliament and the Council on short-selling and certain aspects of credit default swaps, any person who acquires or disposes of a net short position relating to the issued share capital of ING Group, whether by a transaction in shares or ADRs, or by a transaction creating or relating to any financial instrument where the effect or one of the effects of the transaction is to confer a financial advantage on the person entering into that transaction in the event of a change in the price of such shares or ADRs, is required to publicly notify, the Dutch Authority for the Financial Markets, in accordance with the provisions of the above-mentioned regulation if, as a result of such acquisition or disposal the person's net short position reaches, exceeds or falls below 0.2 percent of the issued share capital of ING Group and each 0.1 percent above that. Each reported net short position equal to 0.5% of the issued share capital of ING and any subsequent increase of that position by 0.1% will be made public via the short selling register on the website of the Dutch Authority for the Financial Markets.

## Investor Relations and bilateral contacts with investors

ING Group encourages and recognises the importance of bilateral communication with the investment community. The Investor Relations department actively manages communications with current and potential shareholders, holders of ADRs, bondholders, industry analysts and rating agencies.

ING Group strives to provide clear, accurate and timely financial information that is in strict compliance with applicable rules and regulations, in particular those concerning selective disclosure, inside information and equal treatment. In addition to the General Meetings, ING Group may communicate with its shareholders, the investment community and the general public through earnings announcements, presentations and meetings with analysts, investors and the press.

ING Group publishes a comprehensive quarterly disclosure package that includes extensive and detailed financial figures with relevant explanatory remarks. This information is discussed thoroughly on the day of the earnings release during media, analyst and investor conference calls. These are broadly accessible to interested parties. The publication dates of quarterly earnings releases are announced in advance on ING Group's website.

ING generally hosts one Investor Relations Day every two to three years. These events are announced in advance on ING Group's website, and presentation materials are made available in real time on the website. This is in accordance with the applicable regulatory requirements intended to ensure that all shareholders and other market participants have equal and simultaneous access to information that could potentially influence the price of ING Group's securities. ING Group's Investor Relations Days can be accessed by means of live webcasts. ING Group may also participate in industry conferences. Investor Relations Days or conferences in which ING Group participates will not take place during the period immediately prior to the publication of quarterly financial results.

ING Group strives to maintain an open and constructive dialogue with current and potential investors, and with industry analysts. The scope of such bilateral communication may range from single investor queries via email, to more elaborate discussions with analysts or institutional investors that take place via telephone or face to face. ING Group's Investor Relations department is the main point of contact for these communications. Executive Board members or Management Board Banking members or divisional management members may also participate in investor meetings. These meetings are not announced in advance, nor can they be followed by webcast or any other means. Information provided during such occasions or in any contacts with the press is limited to what is already publicly available.

If bilateral communication between ING Group and investors is organised and/or facilitated through a broker, an analyst or specialist salesperson representing the broker may be present in the meeting.

In the event that any inside information is inadvertently disclosed during any bilateral contacts, it is ING Group's policy, in accordance with applicable regulations, to publish such information as soon as possible.

ING Group may decide not to accommodate or accept any requests or invitations to enter into a dialogue with potential investors, or to accommodate or accept such request or invitation under specific conditions. It is ING's policy not to initiate bilateral contacts or contacts with the press during the period immediately prior to publication of regular quarterly results.

Approximately 25 analysts actively cover and generally issue reports on ING Group. A list of these analysts can be found under 'Analyst Coverage' in the Investor Relations section of ING Group's website. During 2019, ING Group did not provide any form of compensation to parties that are directly or indirectly involved in the production or publication of analysts' reports, with the exception of credit-rating agencies.

ING Group held an Investor Day on 25 March 2019 in Offenbach am Main, near Frankfurt, Germany. During the event, CEO Ralph Hamers provided an update of ING's Think Forward strategy, discussed compliance and shared his view on the future of banking. Members of ING's Management Board Banking and other senior leaders also presented at the Investor Day, offering insights into the bank's financials, operations and business segments.

ING Group participated in 12 industry conferences during 2019. In total, there were approximately 850 meetings (including conference calls) with institutional investors and/or analysts during 2019. Conference presentations and face-to-face meetings with investors and/or analysts took place in 25 different cities across the globe.

The geographical distribution of ING Group's investor base is diverse: an estimated 38 percent of our shares are held in the United States, 20 percent in the United Kingdom, 10 percent in France, 9 percent in Germany, 3 percent in the Netherlands, 5 percent in Switzerland, 8 percent in Rest of Europe and 7 percent in Rest of the World. These figures are based on year-end 2019 estimates of institutional share ownership from investor intelligence service provider IHS Markit.

Read more in the 'ING Shares' chapter.

# General Meeting

## Frequency, notice and agenda of General Meetings

ING's General Meeting is normally held each year in April or May to discuss the course of business in the preceding financial year on the basis of the reports prepared by the Executive Board and the Supervisory Board, and to decide on:

- The distribution of dividends or other distributions;
- The appointment and/or reappointment of members of the Executive Board and the Supervisory Board;
- Any other items requiring shareholder approval pursuant to Dutch law; and
- Any other matters proposed by the Supervisory Board, the Executive Board or shareholders in accordance with the Articles of Association.

General Meetings are convened by public notice via the ING Group website (www.ing.com) at least 42 days before the day of the General Meeting.

As provided for in the Dutch Civil Code, implementing the BRRD, ING Group's Articles of Association permit this convocation period to be shortened to 10 days if (i) ING Group meets the criteria for early intervention measures; (ii) resolution can be avoided by means of a capital increase; and (iii) a general meeting would be required to enable ING Group to issue the required number of shares.

As of the date of convening a General Meeting, all information relevant for shareholders is made available via the ING Group website and through its head office. Information relevant for shareholders includes the notice of the General Meeting, the agenda with instructions on how to participate in the meeting (either in person or by proxy), the place and time of the meeting, the address of the website of ING Group, the explanatory notes to the agenda including the verbatim text of the proposals, as well as the reports of the Executive Board and the Supervisory Board.

## Proposals by shareholders

Proposals to include items on the agenda for a General Meeting that have been adequately substantiated under applicable Dutch law can be made by shareholders representing together at least one per cent of the issued share capital.

## Dialogue with shareholders

Shareholders are given the opportunity to contact ING about the Annual General Meeting, via the Annual General Meeting dedicated web page on the website of ING Group (www.ing.com).

## Record date

Pursuant to Dutch law, the record date for attending a General Meeting and voting on the proposals at that General Meeting is the 28th day before the day of the General Meeting. Only those who hold shares at the record date are entitled to attend the General Meeting and to exercise other rights related to the General Meeting in question on the basis of their holding at the record date, notwithstanding any subsequent sale or purchase of shares. The record date is published in the notice for the General Meeting. If the shortened convocation of 10 days is applicable (see above, paragraph: 'Frequency, notice and agenda of General Meetings'), the record date is two days after the convocation date.

In accordance with US requirements, the depositary sets a record date for the ADRs, which date determines which ADRs are entitled to give voting instructions. This record date can differ from the record date set by ING Group for shareholders.

## Attending General Meetings

Shareholders may attend a General Meeting in person or may grant a proxy in writing to a third party to attend the meeting and vote on their behalf. Prior to a General Meeting, ING will make proxy forms available on its website. For logistical reasons, attending the General Meeting, either in person or by proxy, is subject to the requirement that ING Group is notified in advance. Instructions to that effect are included in the notice for the General Meeting.
General Meetings are webcast via ING Group's website www.ing.com, so that shareholders who do not attend the General Meeting in person may nevertheless follow the meeting online.

## Voting rights on shares

Each share entitles the holder to cast one vote at the General Meeting. The Articles of Association do not restrict the voting rights on any class of shares. ING Group is not aware of any agreement pursuant to which voting rights on any class of its shares are restricted.

## Proxy voting facilities

ING Group provides proxy voting facilities to its investors via its website and solicits proxies from its ADR holders in line with common practice in the US.

Proxy voting forms for shareholders are made available on the website of ING Group (www.ing.com). By returning the form, shareholders give a proxy to an independent proxy holder (a public notary registered in the Netherlands) who will vote according to the instructions expressly given on the proxy form. The submission of these forms is subject to additional conditions specified on such forms.

To encourage participation at the General Meeting, ING provides the EVO (e-voting) platform, an online facility through which shareholders can register for a meeting or appoint a proxy.

## Main powers of the General Meeting

The main powers of the General Meeting are to decide on:

- the appointment, suspension and dismissal of members of the Executive Board and members of the Supervisory Board, subject to a binding nomination or a proposal of the Supervisory Board as set forth in the Articles of Association;

- the adoption of the financial statements;
- the declaration of dividends, subject to the power of the Executive Board to allocate part or all of the profits to the reserves – with approval of the Supervisory Board – and the declaration of other distributions, subject to a proposal by the Executive Board and approved by the Supervisory Board.
- the appointment of the external auditor;
- an amendment of the Articles of Association, a legal merger or division of ING Group, and winding-up of ING Group, all subject to a proposal made by the Executive Board with approval by the Supervisory Board;
- the issuance of shares or rights to subscribe for shares, the restriction or exclusion of pre-emptive rights of shareholders, and delegation of these powers to the Executive Board, subject to a proposal by the Executive Board that has been approved by the Supervisory Board;
- the authorisation of a repurchase of outstanding shares and/or a cancellation of shares. In addition, the approval of the General Meeting is required for Executive Board decisions that would be expected to have a material effect on the identity or nature of ING Group or its enterprise.

## Reporting

Resolutions adopted at a General Meeting are generally published on the website of ING Group (www.ing.com) within one week following the meeting. In accordance with the Dutch Corporate Governance Code, the draft minutes of the General Meeting are made available to shareholders on the website of ING Group (www.ing.com) no later than three months after the meeting. Shareholders may react to the draft minutes in the following three months, after which the final minutes are adopted by the chairman of the meeting in question and by a shareholder appointed by that meeting. The final minutes are made available on the website of ING Group (www.ing.com). By exception to the provisions of the Dutch Corporate Governance Code, shareholders will not have the opportunity to react to the minutes of a General Meeting if a notarial report of the meeting is made, as this would be in conflict with laws applicable to such notarial report.

# Executive Board

## Appointment, suspension and dismissal

Members of the Executive Board are appointed, suspended and dismissed by the General Meeting. For the appointment of Executive Board members, the Supervisory Board may draw up a binding list, which may be rendered non-binding by the General Meeting. A resolution of the General Meeting to render this list non-binding, or to suspend or dismiss Executive Board members without this being proposed by the Supervisory Board, requires an absolute majority of the votes cast. Additionally, this majority must represent more than half of the issued share capital. The Articles of Association exclude the waiver of the latter requirement in a second General Meeting. This ensures that significant proposals of shareholders cannot be adopted in a General Meeting with a low attendance rate and can only be adopted with substantial support of ING Group's shareholders.

Candidates for appointment to the Executive Board are subject to a suitability and reliability assessment by DNB and ECB and must continue to meet these while in function.

## Function of the Executive Board

The Executive Board is charged with the management of ING Group. This includes responsibility for setting and achieving ING Group's strategy, objectives and policies, as well as the ensuing delivery of results. It also includes the day-to-day management of ING Group. The Executive Board is accountable for the performance of these duties to the Supervisory Board and the General Meeting. The responsibility for the management of ING Group is vested in the Executive Board collectively. The organisation, powers and modus operandi of the Executive Board are detailed in the Charter of the Management Board.

The Charter of the Management Board is available at www.ing.com.

According to the Banker's Oath that is taken by the members of the Executive Board, they must carefully consider the interests of all stakeholders of ING. In that consideration they must put the customer's interests at the centre of all their activities.

ING Group indemnifies the members of the Executive Board against direct financial losses in connection with claims from third parties, as far as permitted by law, on the conditions laid down in the Articles of Association and their commission contract. ING Group has taken out liability insurance for the members of the Executive Board.

## Profile of members of the Executive Board

ING Group aims to have an adequate and balanced composition of its Executive Board. The Supervisory Board annually assesses the composition of the Executive Board on a continuous basis.

The Supervisory Board has drawn up a profile to be used as a basis for selecting members of the Executive Board. It is available on the website of ING Group (www.ing.com).

ING aims for the Executive Board of ING to consist of a diverse selection of persons with executive experience, preferably gained in the banking sector, experience in corporate governance of large stock-listed companies and experience in the political and social environment in which such companies operate. In addition, there should be a good balance in the experience and affinity with the desired nature and culture of the business of ING. ING strives to have at least 30 percent of the seats held by women, and at least 30 percent of the seats by men.

In 2018, ING introduced a new principle in a bid to bolster diversity within our organisation. The 70 percent principle gives managers a basis for building mixed teams around appropriate dimensions of diversity (with a focus on gender, nationality and age group) and strives for a 30 percent difference in team make-up. It is our ambition to adhere to this principle across the organisation within both local and global teams. This principle is incorporated into succession planning for the Executive Board.

### Diversity and succession planning

The guidelines that relate to the composition of the Executive Board, are laid down in the Executive Board Profile. Based on this profile, the Supervisory Board is responsible for selecting and nominating candidates for appointment or reappointment to the Executive Board.

Finding suitable candidates remains challenging, as there are numerous requirements to take into account, including gender to enhance the composition of the Executive Board and specific criteria for each function, including regulatory requirements.

As an example to demonstrate the aforementioned: with the unexpected departure of the previous CFO Koos Timmermans, in early 2018, the Supervisory Board was faced with the challenge of appointing a successor as soon as possible. For the succession of the CFO position we reviewed a number of suitable candidates from diverse backgrounds. When searching for new Executive Board members, the Supervisory Board looks broadly at diversity – considering all aspects as well as primarily looking to ensure ING has the best candidate for the job.

### Succession planning

Currently, there are no female members of the Executive Board, although our ambition of gender diversity remains unchanged. The succession planning for Executive Board positions is continually worked on, balancing the career advancement of (female) senior managers, considering female candidates fit for the role and bringing in talents from outside the bank. In view of the appointment terms of the current Executive Board members (every four years) ING considers it likely that the preferred gender balance will not be achieved in the short term as replacements are not currently envisaged. We are therefore unable to set a clear deadline to reach this gender balance.

We are also looking long term and taking steps to improve the appointment of women in senior positions throughout the bank in line with our recently adopted diversity and inclusion principle. See more information in the 'Our people' chapter.

## Remuneration and share ownership

Members of the Executive Board are permitted to hold shares in the share capital of ING Group for long-term investment purposes. Transactions by members of the Executive Board in these shares are subject to the ING regulations for insiders. These regulations are available on the website of ING Group (www.ing.com).

Details of the remuneration of members of the Executive Board, including shares granted to them, together with additional information, are provided in the 'Remuneration report' chapter.

## Ancillary positions/conflicting interests

No member of the Executive Board has corporate directorships at listed companies outside ING.

## Transactions involving actual or potential conflicts of interest

In accordance with the Dutch Corporate Governance Code, transactions with members of the Executive Board in which there are significant conflicts of interest will be disclosed in the Annual Report.

Significant conflicting interests are considered to be absent and are not reported if a member of the Executive Board obtains financial products and services, other than loans, which are provided by ING Group subsidiaries in the ordinary course of their business on terms that apply to all employees. In connection with the aforementioned, the term loans does not include financial products in which the granting of credit is of a subordinated nature, e.g. credit cards and overdrafts in current account, because of a lack of materiality.

For an overview of loans granted to members of the Executive Board, see page 133 of the 'Remuneration report' chapter.

# Information on members of the Executive Board

## R.A.J.G. (Ralph) Hamers, chief executive officer ('CEO')

(Born 1966, Dutch nationality, male; appointed in 2013, will step down as of 30 June 2020)

Ralph Hamers has been a member of the Executive Board of ING Group since 13 May 2013 and was appointed CEO and chairman of the Executive Board and the Managing Board Banking on 1 October 2013. He is responsible for the proper functioning of the Executive Board, the Management Board Banking and its committees, formulating and implementing ING's strategy and acting as main contact for the Supervisory Board. He is also responsible for the following departments: Innovation, Legal, Corporate Strategy, Corporate HR, CoE Comms & Brand Experience and Corporate Audit Services. He joined ING in 1991 and has held various positions including global head Wholesale Banking Network from 2007 to 2010, head of Network Management for Retail Banking Direct & International from 2010 to 2011, and CEO of ING Belgium and Luxembourg from 2011 to 2013. Due to the resignation of the head of Market Leaders in July 2019, he took up this role on an interim basis, with responsibility for ING Bank's operations in the Benelux. In late 2019, Pinar Abay was appointed head of Market Leaders and member of the Management Board Banking, effective from 1 January 2020. Ralph Hamers holds a Master of Science degree in Business Econometrics/Operations Research from Tilburg University, the Netherlands.

As announced on 20 February 2020, Ralph Hamers will step down from his position and leave ING as of 30 June 2020. He will join UBS on 1 September 2020 and will become group chief executive officer per 1 November 2020. He will remain in his role as chief executive officer of ING Groep N.V. and ING Bank N.V. until 30 June 2020 continuing to run the daily business and working with the Executive Board and the Management Board Banking to ensure a smooth transition of leadership. Further announcements on the succession process will be made if and when appropriate.

### Relevant positions pursuant to CRD IV[2]

Chairman and CEO of the Executive Board of ING Groep N.V. and of the Management Board Banking of ING Bank N.V.

### Other relevant ancillary positions

Member of the Management Board of the Nederlandse Vereniging van Banken (NVB), member of the Board of Directors of the Institute of International Finance, Inc., non-executive member of the board Concertgebouw Orkest and member of UNICEF's Global Board of the Young People's Agenda.

## T. (Tanate) Phutrakul, chief financial officer ('CFO')

(Born 1965, Thai nationality, male; appointed in 2019, term expires in 2023)

Tanate Phutrakul was appointed as chief financial officer of ING Groep N.V. and ING Bank N.V. and member of the Management Board Banking of ING Bank on 7 February 2019. Subsequently, he was appointed as a member of the Executive Board of ING Groep N.V. at the Annual General Meeting on 23 April 2019.
Tanate Phutrakul is responsible for ING's financial departments, Group Treasury (including capital management activities), Investor Relations, Group Research and Regulatory & International Affairs. Before his appointment to the Executive Board, he was ING Group controller in Amsterdam and between 2015-2018 he was the CFO of ING in Belgium.

He holds a master's degree in Engineering from Imperial College, University of London, and an MBA from Harvard Business School.

### Relevant positions pursuant to CRD IV

Member and CFO of the Executive Board of ING Groep N.V., member and CFO of the Management Board Banking of ING Bank N.V., and non-executive member of the board of ING Belgium N.V./S.A.

## S.J.A. (Steven) van Rijswijk, chief risk officer ('CRO')

(Born 1970, Dutch nationality, male; appointed in 2017, term expires in 2021)

Steven van Rijswijk has been a member of the Executive Board since 8 May 2017. He was appointed CRO on 1 August 2017. He is also a member and CRO of the Management Board Banking. Before becoming a member of the Executive Board, he was global head of Client Coverage within ING Wholesale Banking. Steven van Rijswijk joined ING in 1995 in the Corporate Finance team holding various positions in the areas of Mergers & Acquisitions and Equity Markets. He holds a master's degree in business economics from Erasmus University Rotterdam (the Netherlands).

### Relevant positions pursuant to CRD IV

Member and CRO of the Executive Board of ING Groep N.V. and member and CRO of the Management Board Banking of ING Bank N.V.

## Changes in the composition

Tanate Phutrakul was appointed as a member of the Executive Board of ING Groep N.V. at the Annual General Meeting on 23 April 2019. As announced on 20 February 2020, Ralph Hamers will step down as chief executive officer of ING Groep N.V. and ING Bank N.V. as of 30 June 2020. He will join UBS on 1 September 2020 and will become group chief executive officer per 1 November 2020. Further announcements on the succession process will be made if and when appropriate.

[2] The fourth EU Capital Requirements Directive 2013/36/EU

# Supervisory Board

## Appointment, suspension and dismissal

Members of the Supervisory Board are appointed, suspended and dismissed by the General Meeting. For the appointment of Supervisory Board members, the Supervisory Board may draw up a binding list, which may be rendered non-binding by the General Meeting.

A resolution of the General Meeting to render this list non-binding, or to suspend or dismiss Supervisory Board members without this being proposed by the Supervisory Board, requires an absolute majority of the votes cast. Additionally, this majority must represent more than half of the issued share capital. The Articles of Association exclude the waiver of the latter requirement in a second General Meeting. This ensures that significant proposals of shareholders cannot be adopted in a General Meeting with a low attendance rate and can only be adopted with substantial support of ING Group's shareholders.

Candidates for appointment to the Supervisory Board are subject to a suitability and reliability assessment by DNB and ECB and must continue to meet these while in function.

## Function of the Supervisory Board

The function of the Supervisory Board is to supervise the policy of the Executive Board and the general course of affairs of ING Group and its business, as well as to provide advice to the Executive Board.

In line with Dutch company law, the Articles of Association, the Dutch Corporate Governance Code as well as the Charter of the Supervisory Board, all members of the Supervisory Board are required to:

- act in accordance with the interests of ING Group and the business connected with it, taking into account the relevant interests of all stakeholders of ING Group;
- perform their duties without mandate and independent of any interest in the business of ING Group; and
- refrain from supporting one interest without regard to the other interests involved.

According to the Banker's Oath that was taken by the members of the Supervisory Board, they must carefully consider the interests of all stakeholders of ING. In that consideration they must put the customer's interests at the centre of all their activities. Certain resolutions of the Executive Board, specified in the Articles of Association, in the Charter of the Management Board and in Charter of the Supervisory Board, are subject to approval of the Supervisory Board.

Pursuant to the Articles of Association ING Group indemnifies the members of the Supervisory Board as far as legally permitted against direct financial losses in connection with claims from third parties lodged or threatened to be lodged against them by virtue of their service as a member of the Supervisory Board.

## Profile of members of the Supervisory Board

The Supervisory Board has drawn up a profile to be used as a basis for its composition. It is available on the website of ING Group (www.ing.com).

In view of their experience and the valuable contribution that former members of the Executive Board can make to the Supervisory Board, it has been decided, taking into account the size of the Supervisory Board and ING's wide range of activities, that such individuals may become members of the Supervisory Board of ING Group. Former Executive Board members must wait at least one year before becoming eligible for appointment to the Supervisory Board.

Former members of the Executive Board are not eligible for appointment to the position of chairman or vice-chairman of the Supervisory Board.

After a former member of the Executive Board has been appointed to the Supervisory Board, this member may also be appointed to one of the Supervisory Board's committees. However, appointment to the Audit Committee is only possible if the individual in question resigned from the Executive Board at least three years prior to such appointment.

The Supervisory Board of ING shall consist of a mix of persons with executive experience, preferably gained in the banking sector, experience in corporate governance of large stock-listed companies and experience in the political and social environment in which such companies operate. In the selection of Supervisory Board members, ING is striving for a balance in nationality, gender, age, and educational and work background. In addition, there should be a balance in the experience and affinity with the nature and culture of the business of ING and its subsidiaries. More specifically ING strives to have at least 30 percent of the seats held by women, and at least 30 percent of the seats by men. These guidelines that relate to the composition of the Supervisory Board, are laid down in the Supervisory Board Profile. Based on this profile, the Supervisory Board is responsible for selecting and nominating candidates for appointment or reappointment to the Supervisory Board.

With respect to gender diversity, three female members currently serve on the Supervisory Board: Mariana Gheorghe, Margarete Haase and Herna verhagen, the latter appointed on 23 April 2019, with her membership becoming effective per 1 October 2019. With the appointment of Herna Verhagen in 2019 the Supervisory Board has met its 30 percent gender diversity target.

We believe that the Supervisory Board, diversity wise, is well balanced in terms of other relevant diversity aspects. Overall, the preferred emphasis on members with a financial or banking background has been maintained. In terms of nationality, the ratio between Dutch and non-Dutch nationalities in 2019 was 44 percent - 56 percent.

Other diversity related aspects are also taken into consideration in light of the overall SB composition (see 'Report of the Supervisory Board' chapter).

## Term of appointment of members of the Supervisory Board

As a general rule, Supervisory Board members step down from the Supervisory Board in the fourth, eighth, 10th and 12th year after their initial appointment. They are eligible for re-appointment in the fourth year after their initial appointment and, with explanation, also in the eighth and 10th year.

Under special circumstances the Supervisory Board may, with explanation, deviate from this general rule, for instance to maintain a balanced composition of the Supervisory Board and/or to preserve valuable expertise and experience. The retirement schedule is available on the website of ING Group (www.ing.com).

## Ancillary positions/conflicting interests

Members of the Supervisory Board may hold other positions, including directorships, either paid or unpaid.

CRD IV restricts the total number of supervisory board positions or non-executive directorships with commercial organisations that may be held by a Supervisory Board member to four, or to two, if the Supervisory Board member also has an executive board position. The European Central Bank may, under special circumstances, permit a Supervisory Board member to fulfil an additional supervisory board position or non-executive directorship. Positions with, inter alia, subsidiaries or qualified holdings are not taken into account in the application of these restrictions. Such positions may not conflict with the interests of ING Group. It is the responsibility of the individual member of the Supervisory Board and the Supervisory Board collectively to ensure that the directorship duties are performed properly and are not affected by any other positions that the individual may hold outside ING Group.

Members of the Supervisory Board are to disclose material conflicts of interest (including potential conflicts of interest) and to provide all relevant information relating to them. The Supervisory Board – without the member concerned taking part – then decides whether a conflict of interest exists.

In case of a conflict of interest, the relevant member of the Supervisory Board abstains from discussions and decision-making on the topic or the transaction in relation to which he or she has a conflict of interest with ING Group.

## Transactions involving actual or potential conflicts of interest

In accordance with the Dutch Corporate Governance Code, transactions involving members of the Supervisory Board in which there are material conflicting interests are disclosed in the Annual Report.

Any relation that a member of the Supervisory Board may have with ING Group subsidiaries as an ordinary, private individual is not considered a significant conflict of interest. Such relationships are not reported, with the exception of any loans that may have been granted.

For an overview of loans granted to members of the Supervisory Board, see the 'Remuneration report' chapter.

## Independence

The members of the Supervisory Board are requested to assess annually whether the criteria of dependence set out in the Dutch Corporate Governance Code do not apply to them and to confirm this in writing. On the basis of these criteria, all members of the Supervisory Board, with the exception of Eric Boyer de la Giroday, are to be regarded as independent on 31 December 2019. Eric Boyer de la Giroday is not considered independent because of his former position as Chairman of the Board of Directors of ING Belgium SA/NV and his former positions as member of the Executive Board of ING Group and vice-chairman of the Management Board Banking of ING Bank N.V. On the basis of the NYSE listing standards, all members of the Supervisory Board are independent.


## Permanent committees of the Supervisory Board

On 31 December 2019, the Supervisory Board had four permanent committees: the Risk Committee, the Audit Committee, the Nomination and Corporate Governance Committee and the Remuneration Committee. An organisational chart of the four permanent committees of the Supervisory Board can be found above.

The organisation, powers and conduct of the Supervisory Board are detailed in the Supervisory Board Charter that can be found on www.ing.com.

Separate charters have been drawn up for the Risk Committee, the Audit Committee, the Nomination and Corporate Governance Committee and the Remuneration Committee. These charters are available on the website of ING Group (www.ing.com). A short description of the duties of the four permanent committees follows below.

The Risk Committee assists and advises the Supervisory Board in monitoring the risk profile of ING as a whole as well as on the structure and operation of the internal risk management and control systems. On 31 December 2019, the members of the Risk Committee were: Robert Reibestein (chairman), Jan Peter Balkenende, Eric Boyer de la Giroday, Mariana Gheorghe, Hermann-Josef Lamberti and Mike Rees.

The Audit Committee assists and advises the Supervisory Board in monitoring the integrity of the financial statements of ING Group and ING Bank N.V., in monitoring compliance with legal and regulatory requirements and in monitoring the independence and performance of ING Group's internal and external auditors. On 31 December 2019, the members of the Audit Committee were: Hermann-Josef Lamberti (chairman), Eric Boyer de la Giroday, Margarete Haase, Robert Reibestein and Hans Wijers.

The appointment of Margarete Haase as supervisory board member became effective as per 1 May 2018 (as decided by the Supervisory Board in January 2018) and per that date Margarete Haase is considered a financial expert as defined by the SEC in its final rules implementing Section 407 of the Sarbanes-Oxley Act of 2002. Eric Boyer de la Giroday is a financial expert as defined in the Dutch Corporate Governance Code considering his academic background as well as his knowledge and experience in his previous role as board member and vice-chairman of ING Groep N.V. and ING Bank N.V.

The Nomination and Corporate Governance Committee's tasks include advising the Supervisory Board on the composition of the Executive Board and Supervisory Board and assisting the Supervisory Board in monitoring and evaluating the corporate governance of ING as a whole and the reporting thereon in the Annual Report and to the General Meeting, and advising the Supervisory Board on improvements. On 31 December 2019, the members of the Nomination and Corporate Governance Committee were: Hans Wijers (chairman), Mariana Gheorghe and Herna Verhagen.

The Remuneration Committee's tasks include advising the Supervisory Board on the terms and conditions of employment (including remuneration) of the members of the Executive Board and on the policies and general principles on which the terms and conditions of employment of the members of the Executive Board and of senior managers of ING Group and its subsidiaries are based. On 31 December 2019 the members of the Remuneration Committee were: Mariana Gheorghe (chairman until 1 October 2019), Herna Verhagen (chairman from 1 October 2019), Robert Reibestein and Hans Wijers.

The composition of the Supervisory Board Committees can be found on ING Group's website www.ing.com.

### Remuneration and share ownership

Remuneration of the members of the Supervisory Board is determined by the General Meeting and is not dependent on the results of ING Group. Details of remuneration are provided in the Remuneration report on page 133. Members of the Supervisory Board are permitted to hold shares in the share capital of ING Group for long-term investment purposes. Details are given on page 133. Transactions by members of the Supervisory Board in these shares are subject to the ING regulations for insiders.

ING regulations regarding insiders are available on www.ing.com.

## Information on members of the Supervisory Board

### G.J. (Hans) Wijers (Chairman)

(Born 1951, Dutch nationality, male; appointed in 2017, term expires in 2021)
Former position: chief executive officer and member of the Executive Board of AkzoNobel N.V.

#### Relevant positions pursuant to CRD IV

Chairman of the Supervisory Board of ING Groep N.V./ING Bank N.V. and member of the Supervisory Board of Hal Holding N.V.

#### Other relevant ancillary positions

Chairman of the Supervisory Board of Het Concertgebouw N.V. and member of the Temasek European Advisory Panel of Temasek Holdings Private Limited.

## H.J.M. (Hermann-Josef) Lamberti (Vice-Chairman)

(Born 1956, German nationality, male; appointed in 2013, term expires in 2021)
Former position: chief operating officer of Deutsche Bank AG.

### Relevant positions pursuant to CRD IV

Vice-chairman of the Supervisory Board of ING Groep N.V./ING Bank N.V., non-executive member of the Board of Directors of Airbus Group N.V., chairman of the Supervisory Board of Addiko Bank (including senior business adviser of Advent International GmbH) and director of Frankfurt Technology Management GmbH. The ECB has authorised Hermann-Josef Lamberti to hold a third non-executive position i.e. in deviation of the maximum of two provided for in section 91 of CRD IV.

## J.P. (Jan Peter) Balkenende

(Born 1956, Dutch nationality, male; appointed in 2017, term expires in 2021)
Former position: partner EY (on corporate responsibility).

### Relevant positions pursuant to CRD IV

Member of the Supervisory Board of ING Groep N.V./ING Bank N.V.

### Other relevant ancillary positions

Professor of governance, institutions and internationalisation at Erasmus University Rotterdam (the Netherlands), external senior adviser to EY, member of the Supervisory Board of Goldschmeding Foundation, chairman of the Board of Maatschappelijke Alliantie (the Netherlands) and chairman of the Board of Noaber Foundation.

## E.F.C.B. (Eric) Boyer de la Giroday

(Born 1952, Belgian nationality, male: appointed in 2014, term expires in 2022)
Former position: member of the Executive Board of ING Groep N.V. and ING Bank N.V.

### Relevant positions pursuant to CRD IV

Member of the Supervisory Board of ING Groep N.V./ING Bank N.V. and non-executive chairman of the Board of Directors of ING Belgium SA/NV.

### Other relevant ancillary position

Non-executive director of the Board of Directors of the Instituts Internationaux de Physique et de Chimie fondés par Ernest Solvay, asbl.

## M. (Mariana) Gheorghe

(Born 1956, Romanian nationality, female, appointed in 2015, term expires in 2023)
Former position: CEO of OMV Petrom SA.

### Relevant positions pursuant to CRD IV

Member of the Supervisory Board of ING Groep N.V./ING Bank N.V. and non-executive director of ContourGlobal Plc.

### Other relevant ancillary position

Member of the Advisory Council of the Bucharest Academy of Economic Studies, Romania.

## M. (Margarete) Haase

(Born 1953, Austrian nationality, female; appointed in 2017, term expires in 2021)
Former position: CFO of Deutz AG.

### Relevant positions pursuant to CRD IV

Member of the Supervisory Board of ING Groep N.V./ING Bank N.V. (effective per 1 May 2018), member of the Supervisory Board and chairwoman of the Audit Committee of Fraport AG, member of the Supervisory Board and chairwoman of the Audit Committee of Osram Licht AG and member of the Supervisory Board and chairwoman of the Audit Committee of Marquard & Bahls AG.

### Other relevant ancillary positions
Chairwoman of the Employers Association of Kölnmetall and member of the German Corporate Governance Commission.

## A.M.G. (Mike) Rees
(Born 1956, British nationality, male; appointed in 2019, term expires in 2023)
Former position: Deputy CEO of Standard Chartered Bank PLC.

### Relevant positions pursuant to CRD IV
Member of the Supervisory Board of ING Groep N.V./ING Bank N.V., founder and consultant of Strategic Vitality Ltd and non-executive chairman of Athla Capital Management Ltd.

### Other relevant ancillary position
Non-executive director Mauritius Africa FinTech Hub.

## R.W.P. (Robert) Reibestein
(Born 1956, Dutch nationality, male; appointed in 2012 as an observer, full member as of 2013, stepped down per 1 January 2020)
Former position: senior partner of McKinsey & Company.

### Relevant positions pursuant to CRD IV
Member of the Supervisory Board of ING Groep N.V./ING Bank N.V. and member of the Supervisory Board of IMC B.V.

### Other relevant ancillary positions
Member of the Supervisory Board of Stichting World Wildlife Fund (the Netherlands) and member of the advisory committee of Forward.one.

## H.W.P.M.A. (Herna) Verhagen
(Born 1966, Dutch nationality, female; appointed in 2019, term expires in 2023)
Former position: member of the Supervisory Board of SNS Reaal N.V. (now: SRH N.V.).

### Relevant positions pursuant to CRD IV
Member of the Supervisory Board of ING Groep N.V./ING Bank N.V. (per 1 October 2019), CEO of PostNL N.V. and non-executive Board member and chairwoman of the Nomination Committee of Rexel SA.

### Other relevant ancillary positions
Member of the Supervisory Board, nomination committee and sponsoring committee of Het Concertgebouw N.V., member of the advisory council of Goldschmeding Foundation and member of the Board of VNO-NCW (inherent to her position at Post NL N.V.).

## Company secretary
The Supervisory Board and Executive Board are assisted by the company secretary Cindy van Eldert-Klep.

## Changes in the composition
Mike Rees and Herna Verhagen were appointed during the Annual General Meeting of 23 April 2019. Henk Breukink retired from the Supervisory Board as per the end of the Annual General Meeting of 2019. Robert Reibestein stepped down from the Supervisory Board as per 1 January 2020.

## Financial reporting

ING´s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Due to the listing of ING shares on the New York Stock Exchange, ING Group is required to comply with the SEC regulations adopted pursuant to Section 404 of the Sarbanes-Oxley Act, or SOX 404. These regulations require ING Group to report and certify on an annual basis on the effectiveness of ING Group's internal controls over financial reporting. The SOX 404 internal control activities are organised along the lines of the company´s governance structure, and involve the participation of senior management across ING.

Our internal control over financial reporting includes those policies and procedures that:
- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of ING;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorisations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use or disposition of our assets that could have a material effect on our financial statements.

ING has a process in place where, under the supervision and with the participation of the CEO and CFO, ING evaluates the effectiveness of internal control over financial reporting, based on the criteria of the Committee of Sponsoring Organisations of the Treadway Commission (COSO) in Internal Reporting – Integrated Framework (2013 Framework).

## Change of control provisions

### Legal provisions

Pursuant to the terms of the Dutch Financial Supervision Act, a declaration of no objection from the ECB must be obtained by anyone wishing to acquire or hold a participating interest of at least 10 percent in ING Group and to exercise control attached to such a participating interest. Similarly, on the basis of indirect change of control statutes in the various jurisdictions where subsidiaries of ING Group are operating, permission from, or notification to, local regulatory authorities may be required for the acquisition of a substantial interest in ING Group.

### Change of control clauses in material agreements

ING Group is not a party to any material agreement that becomes effective or is required to be amended or terminated, in case of a change of control of ING Group following a public bid as defined in section 5:70 of the Dutch Financial Supervision Act. ING Group subsidiaries may have customary change of control arrangements included in agreements related to various business activities, such as joint-venture agreements, letters of credit and other credit facilities, ISDA-agreements, hybrid capital and debt instruments, insurance and reinsurance agreements and futures and option trading agreements. Following a change of control of ING Group (as a result of a public bid or otherwise) such agreements may be amended or terminated, leading, for example, to an obligatory transfer of the interest in the joint venture, early repayment of amounts due, loss of credit facilities or reinsurance cover, and liquidation of outstanding futures and option trading positions.

### Severance payments to members of the Executive Board

The contracts entered into with the members of the Executive Board provide for severance payments that become due upon termination of the applicable Executive Board member's contract, including if termination occurs in connection with a public bid as defined in section 5:70 of the Dutch Financial Supervision Act. For purposes of calculating the amounts due, it is not relevant whether or not termination of the employment or commission contract is related to a public bid. Severance payments to the members of the Executive Board are limited to a maximum of one year's fixed salary, in line with the Dutch Financial Supervision Act and the Corporate Governance Code.

### Amendment of the Articles of Association

The General Meeting may resolve to amend the Articles of Association of ING Group, provided that the resolution is adopted based on a proposal of the Executive Board, which has been approved by the Supervisory Board. An amendment of the Articles of Association is required to be executed by notarial deed.

## External auditor

At the Annual General Meeting held on 11 May 2015, KPMG was appointed as the external audit firm for ING Group for the financial years 2016 through 2019. This appointment includes the responsibility to audit the financial statements of ING Group for the financial year 2019, to audit the effectiveness of internal control over financial reporting on 31 December 2019, to report on the outcome of these audits to the Executive Board and the Supervisory Board and to provide an audit opinion on the financial statements of ING Group. Additionally KPMG performs a review of the sustainability information in the annual report to obtain limited assurance and for a number of non-financial KPI's reasonable assurance, about whether this information is free from material misstatement. As sustainability is of strategic importance to ING, the auditor is involved to provide assurance on this information.

The external auditor may be questioned at the Annual General Meeting in relation to its audit opinion on the financial statements. The external auditor will therefore attend and be entitled to address this meeting. The external auditor attended the meetings of the Risk Committee and of the Audit Committee and attended and addressed the 2019 Annual General Meeting, at which the external auditor was questioned on the audit opinion.

At the Annual General Meeting held on 23 April 2019, the extension of the audit mandate of KPMG for the financial years 2020 through 2023 was approved.

The external auditor may only provide services to ING Group and its subsidiaries with the permission of the Audit Committee, in line with the ING Group Policy on External Auditor Independence.

More information on ING Group's policy on External Auditor Independence is available on www.ing.com.

# Dutch Corporate Governance Code Statement by Executive Board

In accordance with best practice provision 1.4.3 of the 2016 Dutch Corporate Governance Code, the Executive Board of ING Groep N.V. states that it is responsible for the design, implementation and functioning of ING's internal risk management and control systems.

ING's internal risk management and control is a process, effectuated by the Executive Board, senior management, and other personnel. It is designed to mitigate risks and provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations;
- Reliability of financial and non-financial information;
- Compliance with laws, regulations and internal policies, and the ING Values as part of the Orange Code;
- Safeguarding of assets, identification and management of liabilities; and
- Strategic goals of ING Groep N.V.

The Developments in risk and capital management chapter as part of the Report of the Executive Board and the Risk Management section elaborate on ING's identified financial and non-financial risks (such as credit risk, market risk, operational risk, IT risk, model risk, compliance risk, funding & liquidity risk and business risk) and how these risks are managed. These sections provide insight into the potential impact on the results of ING Groep N.V. that come forth from these identified risks. The design and functioning of the internal risk management and control systems is based on the Risk Appetite Framework and the Non-Financial Risk Framework. Both frameworks, explained in detail in the Risk Management section, combine various financial and non-financial risk disciplines into a single converged approach and provide the businesses with a overview on their risks and the way these are managed.

This view allows the Executive Board and senior management to form an opinion on the adequacy of internal risk management and control systems regarding the risks they face while pursuing the Executive Board's strategy. In addition ING has a process in place where, under the supervision and with the participation of the CEO and CFO, ING assess the effectiveness of internal control over financial reporting, based on the criteria of the Committee of Sponsoring Organisations of the Treadway Commission ('COSO') in Internal Reporting – Integrated Framework (2013 Framework).

The design and the operation of the internal risk management and control systems are discussed annually with the Risk Committee and the full Supervisory Board, whereas the design and the operation of internal control over financial reporting are discussed annually with the Audit Committee and the Supervisory Board. As part of this process, improvement in the bank-wide Know Your Customer enhancement programme were discussed with the Risk committee of the Supervisory Board.

We are continuing our know your customer (KYC) enhancement programme, which we started in 2016, emphasising regulatory compliance as the key priority. The organisation continues to work hard on enhancing our customer due diligence files and on a number of structural solutions to bring our anti-money laundering activities to a sustainably better level.

In discharging the responsibility for ING's internal risk management and control systems, the Executive Board has made an assessment of the effectiveness of the ING Groep N.V.'s internal control and risk management systems. Based on this assessment, the Executive Board states that during the year under review:

- the report of the Executive Board in the ING Group Annual report 2019 provides sufficient insights into shortcomings in the effectiveness of the internal risk management and control systems;
- those systems provide reasonable assurance that the ING Group Annual report 2019 does not contain material inaccuracies;
- based on the current state of affairs, it is justified that the ING Group Annual report 2019 is prepared on a going concern basis; and
- the report of the Executive Board in the ING Group Annual Report 2019 states those material risks and uncertainties that are relevant to the expectation of ING Groep N.V.'s continuity for the period of twelve months after the preparation of this report.

It should be noted that the above does not imply that these systems and procedures provide absolute assurance to ING as to the realisation of financial and strategic business objectives, or that internal risk management and control systems can prevent or detect all misstatements, inaccuracies, errors, fraud and non-compliances with legislation, rules and regulations.
There are a number of risks in areas where applicable regulations may be unclear, subject to multiple interpretations or under development, or where regulations may conflict with one another, or where regulators revise their previous guidance or courts overturn previous rulings. Despite our efforts to maintain effective compliance procedures and to comply with applicable laws and regulations we therefore cannot rule out the risk of non-compliance with applicable standards. We're committed to conducting our business with integrity, and regulatory compliance remains the priority for 2019 and beyond.

Amsterdam, 2 March 2020

R.A.J.G. (Ralph) Hamers
CEO, chairman of the Executive Board

T. (Tanate) Phutrakul
CFO, member of the Executive Board

S.J.A. (Steven) van Rijswijk
CRO, member of the Executive Board

# Report of ING Continuity Foundation

Stichting Continuïteit ING ('ING Continuity Foundation'), a foundation organised under the laws of the Netherlands, established in Amsterdam, was founded on 22 January 1991.

ING Continuity Foundation is entitled to acquire cumulative preference shares to be newly issued, on the understanding that, following the issue, the number of cumulative preference shares issued may be no more than one third of the total number of shares issued. This entitlement is vested in the Articles of Association of ING Groep N.V.

If new shares other than cumulative preference shares are subsequently issued, ING Continuity Foundation may again exercise its right, subject to the provisions of the preceding sentence. On acquisition of cumulative preference shares, at least 25 percent of the nominal value must be paid on said shares.

In 2019 the board of ING Continuity Foundation (the 'Board') held two meetings, on 27 May and 4 December.

The composition of the Board is currently as follows: Sebastian Kortmann, chairman of the Board, Rob van den Bergh and Allard Metzelaar. Sebastian Kortmann was reappointed as of 13 May 2019 as chairman.

All members of the Board stated that they meet the conditions regarding independence as referred to in the Articles of Association of ING Continuity Foundation.

Amsterdam, 2 March 2020
Board of Stichting Continuiteit ING

# Conformity statement

The Executive Board is required to prepare the financial statements and the Annual Report of ING Groep N.V. for each financial year in accordance with applicable Dutch law and those International Financial Reporting Standards (IFRS) that were endorsed by the European Union.

**Conformity statement pursuant to section 5:25c paragraph 2(c) of the Dutch Financial Supervision Act (Wet op het financieel toezicht).**

The Executive Board is responsible for maintaining proper accounting records, for safeguarding assets and for taking reasonable steps to prevent and detect fraud and other irregularities. It is responsible for selecting suitable accounting policies and applying them on a consistent basis, making judgements and estimates that are prudent and reasonable. It is also responsible for establishing and maintaining internal procedures which ensure that all major financial information is known to the Executive Board, so that the timeliness, completeness and correctness of the external financial reporting are assured.

As required by section 5:25c paragraph 2(c) of the Dutch Financial Supervision Act, each of the signatories hereby confirms that to the best of his knowledge:

- the ING Groep N.V. 2019 financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of ING Groep N.V. and the enterprises included in the consolidation taken as a whole; and the ING Groep N.V. 2019 Annual Report gives a true and fair view of the position at the balance sheet date, the development and performance of the business during the financial year 2019 of ING Groep N.V. and the enterprises included in the consolidation taken as a whole, together with a description of the principal risks ING Groep N.V. is being confronted with.

Amsterdam, 2 March 2020

R.A.J.G. (Ralph) Hamers
CEO, chairman of the Executive Board

T. (Tanate) Phutrakul
CFO, member of the Executive Board

S.J.A. (Steven) van Rijswijk
CRO, member of the Executive Board

# Remuneration report

## Our view on remuneration

FOR INFORMATION ONLY

ING's remuneration approach is designed to attract, motivate and retain leaders and qualified staff who have the skills, abilities, values and behaviours needed to achieve our strategy. It aims to ensure we offer well-balanced remuneration within our risk appetite, promoting effective risk management. At the same time, we take into account our responsibility to our customers, society and other stakeholders, whose trust – quite simply – is our licence to operate.

ING's remuneration principles are important to achieve the bank's strategy, its purpose – to empower people to stay a step ahead in life and in business – and its risk profile. These principles apply to all employees, including members of the Executive Board (hereafter 'EB'). They aim to maintain a balance between short-term and long-term value creation for all stakeholders while being responsible and fair. Ultimately, it's about making sure we are able to effectively reward success and avoid rewarding for failure.

In this report we look back on the year 2019. We report on ING's performance and how 2019 events have impacted remuneration. We outline the current Executive Board and Supervisory Board remuneration policies and share details of remuneration awarded in 2019 to the Executive Board, including variable remuneration, and to the Supervisory Board.

Thereafter, we set out the remuneration approach that applies to all employees and explain more about how total direct compensation and variable remuneration work within ING. We also explain the performance management process and its link to remuneration, and we provide more information on the measures we have in place to mitigate risk.

Overall, the Supervisory Board has concluded that the Executive Board members did well to deliver our results in 2019. Although the underlying result before tax and underlying return on equity decreased compared to 2018, good progress was made in the execution of the Think Forward strategy. This is shown by the continued growth of primary customers, ongoing execution of the KYC enhancement programme with strong governance from top management and further progress in sustainability. See page 141.

Looking ahead, there is an additional section in this year's report outlining the Supervisory Board's proposal for remuneration policies for the Executive Board and the Supervisory Board for the coming years.

This 2019 remuneration report is our first under the requirements of the Dutch Act implementing the Shareholder Rights Directive II (SRD II). This report is also drafted in the spirit of the European Commission’s non-binding draft guidelines for disclosure. We intend to update our 2020 remuneration report to reflect the final guidelines, which we expect will have been published by then, also taking into account the advisory vote of shareholders regarding this 2019 remuneration report.

## Our starting point

The Supervisory Board acknowledges that in the past it has not always got its stance on remuneration right. This was especially apparent in 2018, when a proposal to amend the remuneration policy of the Executive Board elicited much criticism. It was subsequently withdrawn and the Supervisory Board promised to carry out an extensive review of the remuneration policy.

We did this review in 2019, in consultation with advisory bodies and a broad range of stakeholders, holding meaningful discussions to make sure our remuneration approach and subsequent proposal achieves the right balance among the various viewpoints and interests.

## Stakeholder engagement

A long list of stakeholders participated in these discussions, including our Dutch Central Works Council, representatives of Dutch trade unions, the Advisory Council of ING Netherlands, trade bodies and regulatory and governmental authorities such as the Dutch central bank and the European Central Bank. A number of institutional shareholders together holding approximately 24% of ING’s share capital were also consulted, as well as proxy advisory firms and Dutch shareholder advocacy groups. A specialised market research firm elicited qualitative feedback from customers, and we asked current members of the Executive Board for their views, in line with the Dutch Corporate Governance Code.

In these dialogues the most contentious point was the level of total direct compensation. Some investors were concerned about ING’s ability to attract the relevant talent. Other stakeholders were more critical about the general remuneration level. There was also criticism that the EURO STOXX 50 peer group, which ING uses as a benchmark for remuneration, includes too many companies that are not sufficiently comparable.

On the subject of variable remuneration, stakeholders understood and supported the continuation of this within the limits of Dutch legislation (i.e. a maximum of 20% of base salary). There was a clear ask for more transparency about the metrics used to determine variable remuneration and how these are applied for the performance year.

The insights gained from the stakeholder engagement process have significantly contributed to the quality of the remuneration policy that we intend to propose to shareholders at the next Annual General Meeting (hereafter ‘AGM’) in April 2020. Both myself and my colleagues on the Supervisory Board highly appreciate the participation of stakeholders and the meaningful insights they provided.

## Proposed way forward

Based on the various viewpoints, interests, remarks and concerns, going forward we are proposing a moderate annual base salary increase linked to an external indexation reference point such as a consumer price index and ING's CLA increases.

To increase the relevancy of our peer group, the Supervisory Board is proposing to use a smaller one based on geography, relevant talent market, size and governance framework. We intend to include a balancing factor to ensure we also consider relevant peer companies that may not fulfil the other criteria. The proposed benchmark consists of eight comparable Dutch companies and eight relevant European financial services providers.

A summary of the proposed policy is included on page 156. Among other things it aims to provide more clarity on the performance metrics to be used for awarding variable remuneration, how targets are set and how achievements are measured, as well as reflecting ING's risk culture and compliance initiatives.

Subject to approval by shareholders at the next AGM, the new remuneration policies for Executive Board and Supervisory Board members will become effective retroactively from 1 January 2020.

As the discussions with stakeholders last year showed, remuneration is an important topic for many stakeholder groups, who raised varying viewpoints on the topic. Myself and my colleagues on the Supervisory Board are fully committed to making sure we get our approach to remuneration right – for now and in the future. It's about achieving a balance that is right for ING, for customers, shareholders, other stakeholders and society at large.

**Herna Verhagen**
Chairman of the Supervisory Board Remuneration Committee

# Remuneration Report Executive Board and Supervisory Board

FOR ADVISORY VOTE AT 2020 AGM

This part of the Remuneration Report explains how the 2019 EB Remuneration Policy and the current SB Remuneration was implemented during 2019. This part is the Remuneration Report as referred to in the Dutch Act implementing Shareholder Rights Directive II (SRD II). This Remuneration Report will be presented to the 2020 AGM for an advisory vote. In the Remuneration Report 2020 an explanation will be included on how the result thereof has been taken into account. Also the requirements for the report prepared by the Supervisory Board as stated in the Dutch Corporate Governance Code are taken into account.

This 2019 Remuneration Report is our first under the requirements of the Dutch Act implementing Shareholder Rights Directive II (SRD II). This report is also drafted in the spirit of the draft (non-binding) guidelines for disclosure from the European Commission. As such, 2019 should be considered a transitional year. In 2020, we aim to disclose fully in line with these final guidelines.

## Business events 2019

In February 2019, Tanate Phutrakul was appointed as ING's chief financial officer and a member of the Management Board Banking. He was subsequently appointed to the Executive Board at the AGM on 23 April 2019. Tanate Phutrakul succeeded Koos Timmermans who, in consultation with the Supervisory Board, stepped down from his position as chief financial officer and member of the Executive Board of ING Group on 7 February 2019.

At the 2019 AGM shareholders approved the reappointment of Mariana Gheorghe and the appointment of Mike Rees and Herna Verhagen to the Supervisory Board.
Supervisory Board member Robert Reibestein, announced his early resignation effective 1 January 2020 because of persistent personal health issues.

After the very challenging year 2018, a majority of shareholders at the AGM in April 2019 voted against discharge of the Executive Board and Supervisory Board members from their potential liability against the company for their duties performed in 2018. The Supervisory Board and Executive Board fully understand and share the underlying disappointment, especially regarding the shortcomings in the prevention of financial and economic crime, which was also expressed by shareholders in the many direct contacts during the year. Both boards have taken the vote as a clear signal and firm encouragement to continue with the enhancement programme announced in September 2018 and ensure we make structural improvements to bring our gatekeeping function in the area of customer due diligence and anti-money laundering to the appropriate level.

## Executive Board remuneration policy

The current Executive Board remuneration policy (hereafter called the 2019 EB Remuneration Policy) complies with applicable laws and regulations and is in line with the remuneration principles that apply to all employees.

The current remuneration policy for the Executive Board was adopted by shareholders at the AGM on 27 April 2010. Subsequent amendments to this policy were adopted at AGMs on:
- 9 May 2011 in response to new regulatory requirements
- 12 May 2014 with respect to pensions for the Executive Board
- 11 May 2015 to lower the maximum variable remuneration in line with legal requirements and specify that variable remuneration for the Executive Board be paid fully in shares
- 8 May 2017 to extend the deferral period of the variable remuneration from three to five years.

For 2019, the remuneration policy for the Executive Board remained unchanged. Shareholders will be asked to vote on a revised Executive Board remuneration policy at the 2020 AGM, which is a binding vote. For further information on the revised policy, we refer to the Chairman's letter on page 133.

## Total direct compensation

Total direct compensation for the Executive Board is determined and reviewed periodically by the Supervisory Board. In line with the 2019 Executive Board Remuneration Policy, the Executive Board's total direct compensation for 2019 was compared to a peer group EURO STOXX 50 companies. The total direct compensation under the 2019 Executive Board Remuneration Policy is below the median of the EURO STOXX 50. This approach is in line with the requirements laid down in the Dutch Banking Code.

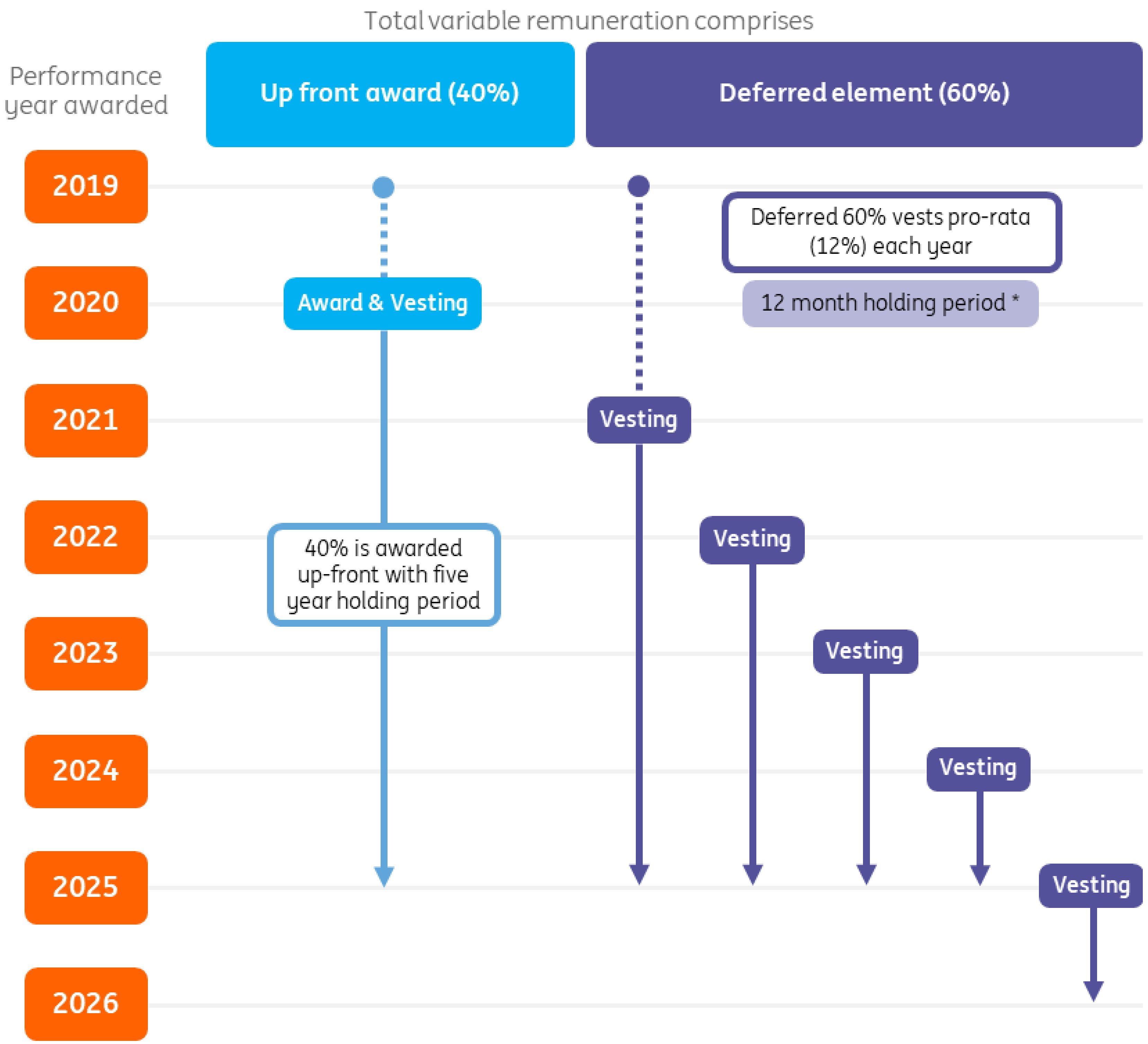
## Variable remuneration

Variable remuneration for Executive Board members is limited to a maximum of 20% of base salary. At least 50% of this is based on non-financial performance criteria. The 2019 EB Remuneration Policy provides for an at-target variable remuneration of 16% of base salary. If performance criteria are exceeded, the Supervisory Board can increase the variable component to the maximum. If performance is below target, the variable component will be decreased, potentially to zero.

The Supervisory Board pre-determines the performance criteria for the Executive Board each year to ensure alignment between ING's strategy and performance objectives.

Variable remuneration is paid fully in shares. Forty percent of the variable remuneration is paid upfront and 60% is deferred. For all shares awarded to Executive Board members (in their capacity as board members) there is a minimum retention period of five years from the date of conditional grant and one year from the vesting date. Vesting of any deferred variable remuneration is not subject to performance and can only be adjusted in case of an ex-post risk measure as described in the Risk adjustments paragraph or if an Executive Board member leaves ING. This award approach aligns remuneration with creating long-term value for ING.

## Variable remuneration pay-out scheme Executive Board




* All awards subject to holdback and clawback provisions and a minimum five-year holding period from award.

## Pension

Since 1 January 2015, all members of the Executive Board have participated in the Collective Defined Contribution (CDC) pension plan with respect to their annual salary-up to €107,593 for 2019. This is similar to all employees working in the Netherlands without a supplementary pension scheme. Above this amount, members of the Executive Board are compensated for the lack of pension accrual by means of a savings allowance (see Benefits), to be annually determined, on the same terms that apply to other participants in the Dutch pension scheme.

## Benefits

Executive Board members are eligible for additional benefits (all within benchmarks), such as:

- costs associated with the use of a company car;
- contributions to company savings plans;
- expatriate allowances (if applicable);
- banking and insurance benefits from ING (on the same terms as for other employees of ING in the Netherlands);
- tax and financial planning services to ensure compliance with the relevant legislative requirements.

## Tenure

Members of the Executive Board are appointed by shareholders at the AGM for a maximum period of four years. They may be reappointed by the AGM in line with applicable rules and regulations. Executive Board members have a commission contract for an indefinite period. ING has the option to terminate if they are not reappointed by shareholders at the AGM or if their membership of the board is terminated. There is a three-month notice period for individual board members and a six-month period for ING. During this time the board member continues to work and remains eligible for all agreed remuneration components.

In the event of an involuntary exit, Executive Board members are eligible for an exit arrangement. If termination of the contract is based on mutual agreement, the Executive Board member is also eligible for a severance payment. These arrangements are subject to specific requirements (e.g. limited to a maximum of one year of fixed base salary, under the condition that there should be no reward for failure).

## Periodic review of the remuneration policy and the remuneration paid

In accordance with the 2019 EB Remuneration Policy, the Supervisory Board annually determines the actual remuneration for members of the Executive Board, based on the advice given by the Remuneration Committee of the Supervisory Board.

The Remuneration Committee's responsibilities include preparing the Supervisory Board for decisions regarding the remuneration of individual members of the Executive Board. Remuneration proposals for individual Executive Board members are drawn up in accordance with the 2019 EB Remuneration Policy and cover the following aspects: remuneration structure, the amount of the fixed and variable remuneration components, the performance criteria used, scenario analyses that are carried out and, if and when considered appropriate, the pay ratios within the company and its affiliated enterprises. The Remuneration Committee takes note of the views of individual Executive Board members with regard to the amount and structure of their own remuneration, including the aspects mentioned above.

## Special employment conditions

Special employment conditions, for example to secure the recruitment of new executives, may be used in exceptional circumstances subject to approval by the Supervisory Board. In 2019, there were none.

## 2019 Remuneration Executive Board

This section includes remuneration details for current and former Executive Board members relating to the period that they served on the Executive Board during 2019.[1]

In line with the Dutch Corporate Governance Code, ING determines the internal ratio of remuneration for Executive Board members and a representative reference group. Deemed most relevant for this ratio is the total direct compensation of the CEO compared to the average total direct compensation of all ING employees. On this basis, the internal ratio in 2019 was 1:31. For the sake of transparency we also calculated the ratio of the total direct compensation of the other Executive Board members compared to the average total direct compensation of all ING employees. On that basis the internal ratio in 2019 was 1:21.[2] The higher ratios compared to 2018, is due to fact that no variable remuneration was granted over performance year 2018.[3]

As disclosed in the Annual Report 2018, in consultation with the Supervisory Board, chief financial officer Koos Timmermans stepped down from his position as chief financial officer and as a member of the Executive Board on 7 February 2019. To facilitate an orderly transition and fulfil ING's contractual notice period of six months, he continued to advise the company until 31 August 2019. In line with applicable regulations a severance payment was granted. Although entitled to a maximum severance payment of one year's fixed annual pay, the Supervisory Board at its discretion set the severance pay at a level of 50% of fixed annual pay (€601,800).

### Remuneration versus company performance and average employee remuneration

The table below shows the link between directors' remuneration, company performance and the average remuneration of an ING employee. This is done by presenting the relative development of the remuneration for the Executive Board and Supervisory Board members over the last five years. With respect to the remuneration of the Supervisory Board, note that there is no link to company performance to emphasise their independent role.

Furthermore, the relative performance of the company is presented on three different metrics over the last five years. The metrics consist of:

- Retail primary customers
- Profit before tax ING Group
- Underlying Return on Equity

Finally, we present the development of the remuneration on average (per employee). For this number the same data has been used as to determine the internal ratio. Since the internal ratio was disclosed by ING as of 2017, we only have three years of data available.

Due to the strict regulations on variable remuneration in the Netherlands (e.g. 20% bonus cap) and due to the fact that Executive Board members did not receive any variable remuneration over performance year 2018, the link between remuneration and company performance is relative. Furthermore variable remuneration must be based on at least 50% non-financial targets.

1 Koos Timmermans was an EB member until 6 February 2019; Steven van Rijswijk was appointed to the EB on 8 May 2017; Tanate Phutrakul was appointed to the EB immediately following the 23 April 2019 AGM. As Ralph Hamers has been an EB member for the full years 2017-2019, the full remuneration is presented and no pro-rata method has been applied.

2 Total direct compensation comprises fixed base salary and variable remuneration, excluding benefits such as pension arrangements, and allowances.

3 The internal ratio in 2018 for the CEO was 1:29, for the other Executive Board members this amounted to 1:20. In 2017, the internal ratio for the CEO was 1:33 and for the other Executive Board members this amounted to 1:23.

## Development of directors' remuneration, company performance and employee remuneration

| | FY 2019 | FY 2019 vs FY 2018 | FY 2018 vs FY 2017[4] | FY 2017 vs FY 2016 | FY 2016 vs FY 2015 | FY 2015 vs FY 2014 |
|---|---|---|---|---|---|---|
| **Directors remuneration (Executive Board)[1, 2, 3, 5]** | | | | | | |
| Ralph Hamers | 2,016 | 15.2% | -12.8% | 1.4% | 2.9% | 51.4% |
| Tanate Phutrakul | 973 | - | - | - | - | - |
| Koos Timmermans | 818 | - | -11.8% | - | - | - |
| Steven van Rijswijk | 1,399 | 16.2% | -11.8% | - | - | - |
| **Directors remuneration (Supervisory Board) [6]** | | | | | | |
| Hans Wijers | 202 | 9.2% | 340.5% | - | - | - |
| Hermann-Josef Lamberti | 141 | 1.4% | -1.4% | -5.4% | 34.2% | 37% |
| Jan-Peter Balkenende | 99 | 0% | 200% | - | - | - |
| Henk Breukink | 40 | -68.3% | -0.8% | -8.6% | 39% | 8.7% |
| Mariana Gheorghe | 118 | 12.4% | 11.7% | -4.1% | 145% | - |
| Eric Boyer de la Giroday | 108 | 0% | 1.9% | -7% | 23.9% | 73.6% |
| Margarate Haase | 98 | 55.6% | - | - | - | - |
| Mike Rees | 73 | - | - | - | - | - |
| Robert Reibestein | 136 | -1.4% | 1.5% | -1.4% | 50% | -2.1% |
| Herna Verhagen | 30 | - | - | - | - | - |
| **Company's performance[5, 6]** | | | | - | | |
| Retail primary relationships (in mln) | 13.3 | 7% | 10% | 9% | 14% | 9% |
| Profit before Tax ING Group (continuing operations) (in mln) | 6,834 | 0% | -6% | 23% | -4% | 66% |
| Underlying Return on Equity | 9.4% | -2% | 1% | 0% | 2% | 1% |
| **Average employee remuneration** | | | | | | |
| Average fixed and annual variable remuneration | 65 | 7% | -1.1% | - | - | - |

1 The remuneration of the Executive Board consist of base salary and variable remuneration (total direct compensation).
2 Variable remuneration of the Executive Board is included in the year in which the performance has been delivered. Thus prior to the year in which it has been paid out.
3 The fixed remuneration for the Executive Board has not changed over 2019. Hence, the relative total compensation increase from 2018 to 2019 is fully attributed to the fact that no variable remuneration was awarded over performance year 2018. In addition, since Tanate Phutrakul has not been an Executive Board member for the full year and since Koos Timmermans left ING during the year, the comparison between 2018 and 2019 could not be made.
4 The decrease in 2018 versus 2017 comparison for the CFO and CRO is fully attributed to the fact that for performance year 2018 no variable remuneration has been awarded while over performance year 2017 variable remuneration was awarded. For the CEO the impact is less due to the fact that his fixed remuneration was increased by 2.2% in 2018 compared to 2017. The fixed remuneration for the CFO and CRO remained the same.
5 Fixed remuneration for Executive Board members within ING is not linked to company performance but is based on a benchmark exercise and total direct compensation of Executive Board members should stay below the median of the benchmark based on the Dutch Banking Code. This has a mitigating effect on the correlation with the company performance.
6 Supervisory Board members do not receive any variable remuneration. Their remuneration is based on fixed fees related to their role and amount of meetings. The high fluctuations are caused by joining and leaving the Supervisory Board during the year, change of roles during the year and the difference in the amount of meetings. Hence there is no correlation between the SB remuneration and the company performance.

## 2019 Executive Board base salary

As announced in our 2018 Annual Report, the base salary of all Executive Board members remained the same in 2019 as it was in 2018.

## 2019 performance indicators Executive Board

As indicated in the remuneration policy, the performance of the Executive Board is assessed on non-financial and financial indicators. The performance indicators assessed for 2019 included the following (overview of combined performance indicators of the Executive Board members):

### Financial performance indicators

- Underlying result before tax
- Net core lending
- Underlying return on equity (IFRS-EU) → hurdle for variable pay
- Underlying cost/income ratio
- Common equity Tier 1 ratio (SREP) → hurdle for variable pay

### Non-financial performance indicators

- Customer: ensuring growth of retail primary customers.
- Operational control: ensuring ING is a safe and compliant bank now and in the future, in line with regulations.
- Think Forward Strategy: ensuring intended outcomes of key strategic initiatives are executed and result in improved customer experience and commercial growth.
- People: driving initiatives to continue to be a healthy organisation and great place to work.
- Sustainability: increasing ING's social and environmental impact through our sustainability activities

## 2019 Executive Board performance evaluation

The table below highlights key achievements, collectively accomplished by the Executive Board in 2019 in the areas mentioned. It reflects both ING's overall ambitions and the specific performance priorities agreed with the Supervisory Board at the beginning of 2019.

| | |
|---|---|
| Financial performance | Achieved underlying **result before tax** of €6,834 million down 9.2% from 2018, reflecting a well-diversified loan book with resilient margins, despite margin pressure on customer deposits. The net profit is €4,781 million, up 1.7% from 2018.<br><br>Grew net core lending by €17.2 billion (+2.9%); increased customer deposits by €23.4 billion (+4.2%).<br><br>Realised underlying **return on equity** (IFRS-EU) for ING Group of 9.4%, down from 11.2% in 2018.<br><br>The underlying cost/income ratio decreased to 56.6% from 54.5% in 2018 driven by higher KYC, staff and regulatory costs (51% excluding regulatory costs). |
| Customer | Increased the number of **primary customers** by more than 830,000 to 13.3 million in 2019 (+6.7%).<br>The total retail customer base reaches 38.8 million.<br><br>Ranked number one in Net Promotor Score relative to competitors in six of the 14 retail markets.<br><br>A growing share of Retail customers only interacts with ING on their mobile device, up from 26% in 2018 to 37% in 2019. Increase in conversion of customer interactions into sale, with seven times higher mobile sales in 2019 than in 2016. |

| | |
|---|---|
| Operational Control | In 2019 countering financial and economic crime remained a priority:<br>▪ The number of FTEs working globally on know your customer (KYC) related activities has increased to ~4,000.<br>▪ The increased focus on KYC and efforts to streamline operations are leading to an increased number of accounts being closed, including inactive accounts or accounts of which the customers were insufficiently responsive to information requests.<br>▪ Further progress was made in strengthening the global KYC organisation and governance structure throughout ING.<br>▪ Further progress was made in the global roll-out of KYC tools to enable the onboarding of customers and monitor their transactions across ING's global network in a more effective and consistent way.<br>▪ The implementation of a systematic integrity risk analysis in all business lines and regions was completed, contributing to consistent KYC risk assessments across the bank.<br><br>ING keeps investing in regulatory compliance, developing promising tools to increase accuracy and efficiency in KYC operations:<br>▪ A virtual alert handler using artificial intelligence (AI) to sort 'false positives' from the alerts that need more investigation, so far reducing 'false positives' by half.<br>▪ A tool to detect instances of fraudulent transactions related to "smurfing"; the practice of breaking up transactions into smaller amounts to evade conventional rule-based monitoring systems.<br>▪ An advanced AI-based anomaly detection model to automatically analyse and detect new potentially suspicious behaviour in foreign currency clearing and settlement that ING executes on behalf of others.<br>▪ Development of SparQ, a global platform that uses AI to automate the process of turning regulation into policy. It gives insight into applicable regulations, identifies changes, helps analyse documents and can link regulation directly to our policies.<br><br>ING is committed to periodically providing the Dutch central bank (DNB) with regular updates on the progress made. |
| Execution Think Forward Strategy | Important steps taken in the ***major digital transformation programmes***:<br>▪ **Unite be+nl:** Reduced the branch footprint and introduced two common digital channels across Belgium and Netherlands (OneApp and OneWeb) that have been piloted with customers. Introduction of one platform for all customer-facing collegues to allow supporting customers faster and in a more uniform way.<br>▪ **Maggie (former Model Bank):** The digital platform has now over 450,000 active customers and the platform is ready to onboard customers from Italy, Spain and France in the coming years.<br>▪ **Welcome:** ING in Germany completed the programme early 2019 after introducing a new mobile app (One App) and a Go2Place platform including e-signature, multi-banking account overview, forecasting, third-party services and end-to-end digital process for account opening, consumer loans and mortgages.<br>▪ **Wholesale TOM:** Improved the experience of the ING's Wholesale Banking customers through the implementation of target solutions in Financial Markets, Lending and Transaction Services, setting up a pan-European Daily banking Desk and by expanding our client platform InsideBusiness, which is used by more than 18,000 international clients.<br><br>New initiatives developed and aligned with partners to improve the customer experience being:<br>▪ ING's partnership with **AXA** reached another milestone in 2019 by going live with its global platform, which will provide home, mobility and health insurance services in six markets via the mobile app. The first product |

| | |
|---|---|
| | launched on the platform is home insurance, delivered by the ING mobile app in Italy. This is in addition to the six products launched outside the platform in 2019.<br>▪ **Yolt**, ING's personal finance aggregator, reached over one million users and was chosen as the best personal finance app at the International Payments Awards 2019.<br>▪ The launch of **instant payments** in Netherlands and Belgium, enabling money to be available in five seconds to the beneficiary every moment of the day all year round.<br>▪ Introduction of **ApplePay** to enhanced the experience of our mobile app users.<br>▪ In order to improve the credit decision process for Wholesale Banking clients, ING has invested in **Flowcast**. This is a start-up that uses machine learning algorithms to create predictive models that reduce risk and unlock credit to businesses.<br><br>Major milestone achieved in the ***blockchain area***:<br>▪ ING joined a consortium with MineHub to develop a blockchain-based platform that would help ING clients in the metals and mining sector to lower costs, increase transparency and contribute to sustainable production and trading.<br>▪ First client transaction completed on Komgo, a platform that digitalises and streamlines trade and commodity finance. |
| People | The Organisation Health Index (OHI) survey carried out 2019 showed room for improvement. The overall health score is a performance indicator measuring organisational health relative to a global benchmark of 1,900 companies. Although ING continues to outperform our peers in most areas, there was a decline in the 2019 results. |
| Sustainability | In September ING published the first progress report on **Terra**, ING's approach to steer its €600 billion lending book in line with the goals of the Paris Agreement to keep global warming to well-below two degrees.<br><br>The disclosure addresses developments and climate alignment for the sectors: power generation, fossil fuels, automotive, shipping, aviation, steel, cement, residential mortgages and commercial real estate. These are the sectors in ING's portfolio that are most responsible for greenhouse gas emissions. In a Climate Alignment Dashboard (CAD) the report presents which sectors are on track for climate alignment and where work is still in progress. This climate change disclosure is a first for banks.<br>ING is recognised as an ***A-list company for leadership on climate action*** for the fifth year in a row by CDP, the leading global environmental disclosure platform.<br><br>In 2019 ING reinforced the commitment to help customers reach their sustainability goals by closing more than twice the amount of sustainable finance deals compared to 2018. |

### Variable remuneration outcome

Based on these achievements, the Supervisory Board has concluded that the Executive Board members did well overall to deliver these results. This was despite a challenging rate environment and increase in costs related to the KYC enhancement programme. Although the underlying result before tax and underlying return on equity decreased compared to 2018, good progress was made in the execution of the Think Forward Strategy. This is shown by the continued growth of the primary customer base and the increase in mobile interactions by retail customers. Risk costs remained below the through-the-cycle average. ING also continued executing the KYC enhancement programme, with strong governance from top management, more FTEs working in KYC and the roll-out of global KYC tools. In sustainability ING remains a leading company, making further progress with the Terra approach by partnering with 30 other banks to steer the lending portfolio towards the climate goals of the Paris Agreement. Overall this has resulted in a variable remuneration for the Executive Board members of between 15 and 16%.

## 2019 Executive Board remuneration

The tables below (i.e. total direct compensation, pension costs and other emoluments) show the remuneration awarded to individual Executive Board members with respect to the performance years 2019, 2018 and 2017. The 2019 figures reflect a partial year as Executive Board members for Tanate Phutrakul and Koos Timmermans. The 2018 figures reflect an entire year for all three active members of the Executive Board. The 2017 figures reflect a partial year as Executive Board members for Koos Timmermans and Steven van Rijswijk.

All remuneration of the Executive Board is paid directly by ING, in other words no payments have been made by any of our subsidiaries.

**Total direct compensation for individual Executive Board members**

| | 2019 | | 2018 | | 2017 | |
|---|---|---|---|---|---|---|
| Amounts in euros (rounded figures) | Amount | Number of shares | Amount | Number of shares | Amount | Number of shares |
| Ralph Hamers (CEO) | | | | | | |
| Base salary | 1,750,000 | | 1,750,000 | | 1,713,000 | |
| Variable remuneration (fully in shares)[1] | 266,000 | 25,726 | | | 293,000 | 18,547 |
| | | | | | | |
| Tanate Phutrakul (CFO)[2] | | | | | | |
| Base salary | 831,100 | | | | | |
| Variable remuneration (fully in shares)[1] | 141,400 | 13,675 | | | | |
| | | | | | | |
| Koos Timmermans (CFO)[3] | | | | | | |
| Base salary | 802,400 | | 1,203,600 | | 781,000 | |
| Variable remuneration (fully in shares)[1] | 16,000 | 1,553 | | | 104,000 | 6,612 |
| | | | | | | |
| Steven van Rijswijk (CRO) | | | | | | |
| Base salary | 1,203,600 | | 1,203,600 | | 781,000 | |
| Variable remuneration (fully in shares)[1] | 195,000 | 18,858 | | | 104,000 | 6,584 |
| | | | | | | |
| Total aggregated base salary | 4,587,100 | | 4,157,200 | | 3,275,000 | |
| Total aggregated variable remuneration | 618,400 | | | | 501,000 | |
| Total aggregated number of shares | | 59,812 | | | | 31,743 |

1 The number of shares is based on the average ING share price (€10,34) on the day on which the year-end results were published.
2 Tanate Phutrakul was appointed to the Executive Board immediately following the 23 April 2018 AGM. This amount of variable remuneration reflects his period as an Executive Board member. Thus, for the period from 23 April 2019 – 31 December 2019.
3 Koos Timmermans left ING per 7 February 2019 as an Executive Board member. Until 31 August 2019 he received an advisor fee for the period in which he transferred his activities to his successor. Thus the base salary reflects the payments from 1 January 2019 – 31 August 2019. The amount of variable remuneration however, only reflects his period as an Executive Board member. Thus, for the period from 1 January 2019 – 7 February 2019.

## Pension costs

Members of the Executive Board participate in the Collective Defined Contribution (CDC) pension plan. In 2019, pension accrual only applied to salary up to an amount of €107,593. The table below shows the pension costs of the individual members of the Executive Board in 2019, 2018 and 2017.

**Pension costs for individual Executive Board members**

| Amounts in euros (rounded figures)[1] | 2019 | 2018 | 2017 |
|---|---|---|---|
| Ralph Hamers | 23,000 | 26,000 | 30,000 |
| Tanate Phutrakul[2] | 16,000 | – | – |
| Koos Timmermans[3] | 15,000 | 26,000 | 19,000 |
| Steven van Rijswijk | 23,000 | 26,000 | 19,000 |

1 Pension accrual only applies to salary up to an annually set amount (i.e. €103,317 for 2017, €105,075 for 2018 and €107,593 for 2019).
2 Tanate Phutrakul was appointed to the Executive Board immediately following the 23 April 2018 AGM. Thus, the figures reflect a partial year as an Executive Board member.
3 Koos Timmermans left ING per 7 February 2019 as an Executive Board member. Until 31 August 2019 he received an advisor fee for the period in which he transferred his activities to this successor. Thus the pension costs reflect the period from 1 January 2019 – 31 August 2019.

## Benefits

The individual members of the Executive Board receive other emoluments, including savings allowances to compensate for the loss of pension benefits on salary above €107,593 for 2019, employer contributions to savings schemes, reimbursement of costs related to home/work commute, costs associated with a company car and for expats, the costs associated with housing and schooling.

The other emoluments amounted in 2019, 2018 and 2017 to the following costs.

**Other emoluments**

| Amounts in euros (rounded figures) | 2019[1] | 2018 | 2017[2] |
|---|---|---|---|
| Ralph Hamers | 521,000 | 561,000 | 624,000 |
| Tanate Phutrakul | 235,000 | – | – |
| Koos Timmermans[3] | 231,000 | 408,000 | 290,000 |
| Steven van Rijswijk | 367,000 | 369,000 | 274,000 |

1 The 2019 emoluments reflect the partial year as an Executive Board member for Tanate Phutrakul.
2 The 2017 emoluments for Koos Timmermans and Steven van Rijswijk reflect the partial year as an Executive Board member.
3 Koos Timmermans left ING per 7 February 2019 as an Executive Board member. Until 31 August 2019 he received an advisor fee for the period in which he transferred his activities to his successor. Thus the emoluments reflect the period from 1 January 2019 – 31 August 2019.

| Other emoluments in more detail 2019 | | | | |
|---|---|---|---|---|
| Amounts in euros (rounded figures) | Ralph Hamers | Tanate Phutrakul [2] | Koos Timmermans [3] | Steven van Rijswijk |
| Contribution individual savings | 61,000 | 29,000 | 28,000 | 42,000 |
| Individual savings allowance | 391,000 | 179,000 | 175,000 | 261,000 |
| Travel and accident insurance | 18,000 | 13,000 | 2,000 | 18,000 |
| Other amounts[1] | 50,000 | 15,000 | 26,000 | 46,000 |

1 Other amounts contains the following elements: personnel facility (mortgage), tax and financial planning, one-off compensation for Steven van Rijswijk for retroactive tax impact of use of company car and temporary housing for Tanate Phutrakul.
2 The 2019 emoluments reflect the partial year as an Executive Board member for Tanate Phutrakul.
3 Koos Timmermans left ING per 7 February 2019 as an Executive Board member. Until 31 August 2019 he received an advisor fee for the period in which he transferred his activities to his successor. Thus the emoluments reflect the period from 1 January 2019 – 31 August 2019.

## Total remuneration

The table below contains the total remuneration of the Executive Board members over 2019.

| Total remuneration | | | | | | |
|---|---|---|---|---|---|---|
| Amounts in euros (rounded figures) | Base salary | Variable remuneration | Total direct compensation | Pension | Emoluments | Total remuneration |
| Ralph Hamers | 1,750,000 | 266,000 | 2,016,000 | 23,000 | 521,000 | 2,560,000 |
| Tanate Phutrakul | 831,100 | 141,400 | 972,500 | 16,000 | 235,000 | 1,223,500 |
| Koos Timmermans | 802,400 | 16,000 | 818,400 | 15,000 | 231,000 | 1,064,400 |
| Steven van Rijswijk | 1,203,600 | 195,000 | 1,398,600 | 23,000 | 367,000 | 1,788,600 |

As recognised in the profit or loss statement of 2019, the expenses for each member of the Executive Board (active on 31 December 2019), while serving on the Executive Board, amount to €2.4 million for the CEO, €1.1 million for the CFO and €1.7 million for the CRO.

## Long-term incentives awarded in previous years

Long-term incentives to the Executive Board members in previous years are disclosed in the table on page 149.

## Employee stock options

The table below contains information on the outstanding employee stock options and the movements during the financial year of employee stock options held by the members of the Executive Board on 31 December 2019 including those awarded prior to their appointment to the Executive Board.

### Options held by Executive Board members

| Number of options | Outstanding on 31 December 2019 | Exercised in 2019 | Waived or expired in 2019 | Outstanding on 31 December 2019 | Grant price in euros | Grant date | Vesting date | Expiry date |
|---|---|---|---|---|---|---|---|---|
| Ralph Hamers | 19,985 | 19,985 | | | 2.90 | 19 March 2009 | 19 March 2012 | 19 March 2019 |
| | 22,124 | | | 22,124 | 7.35 | 17 March 2010 | 17 March 2013 | 17 March 2020 |
| Tanate Phutrakul | 4,163 | 4,163 | | | 2.90 | 19 March 2009 | 19 March 2012 | 19 March 2019 |
| | 11,062 | | | 11,062 | 7.35 | 17 March 2010 | 17 March 2013 | 17 March 2020 |
| Steven van Rijswijk | 1,688 | 1,688 | | | 2.90 | 19 March 2009 | 19 March 2012 | 18 March 2019 |
| | 11,658 | 11,658 | | | 2.90 | 19 March 2009 | 19 March 2012 | 18 March 2019 |
| | 2,318 | | | 2,318 | 7.35 | 17 March 2010 | 17 March 2013 | 16 March 2020 |
| | 10,694 | | | 10,694 | 7.35 | 17 March 2010 | 17 March 2013 | 17 March 2020 |

## Shares

Deferred shares are shares conditionally granted subject to a tiered vesting over a period of five years (for awards in 2019 and before), with the ultimate value of each deferred share based on ING's share price on the vesting date. This is all conditional on there being no holdback.

**Shares vested for Executive Board members during 2019**

| Number of shares | Shares [2] | Grant date | Vesting date | End date of retention period | No. of shares granted[5] | No. of shares vested | Vesting price in euros | No. of unvested shares remaining [6] |
|---|---|---|---|---|---|---|---|---|
| Ralph Hamers | LSPP | 11 May 2016 | 11 May 2019 | 11 May 2021 | 28,404 | 5,682 | 10.44 | 0 |
| | LSPP | 11 May 2017 | 11 May 2019 | 11 May 2022 | 23,092 | 4,618 | 10.44 | 4,619 |
| | LSPP | 10 May 2018 | 11 May 2019 | 10 May 2023 | 18,547 | 2,225 | 10.44 | 8,903 |
| Tanate Phutrakul[1] | LSPP Units [3] | 27 March 2015 | 27 March 2019 | N/A | 6,915 | 922 | 10.55 | 0 |
| | LSPP Units [3] | 25 March 2016 | 27 March 2019 | N/A | 7,987 | 1,065 | 10.55 | 1,065 |
| | LSPP Units [3] | 27 March 2017 | 27 March 2019 | N/A | 6,032 | 482 | 10.55 | 1,931 |
| | LSPP Units [3] | 27 March 2018 | 27 March 2019 | N/A | 4,972 | 2,983 | 10.55 | 1,989 |
| | LSPP | 27 March 2019 | 27 March 2019 | 27 March 2020 | 2,837 | 1,702 | 10.55 | 1,135 |
| Koos Timmermans | LSPP[4] | 11 May 2016 | 11 May 2019 | 11 May 2021 | 18,278 | 0 | - | 0 |
| | LSPP[4] | 11 May 2017 | 11 May 2019 | 11 May 2022 | 15,838 | 1,465 | 10.44 | 3,169 |
| | LSPP | 10 May 2018 | 11 May 2019 | 10 May 2023 | 10,139 | 1,216 | 10.44 | 4,867 |
| Steven van Rijswijk[1] | LSPP | 25 March 2016 | 27 March 2019 | 27 March 2020 | 19,362 | 3,227 | 10.55 | 0 |
| | LSPP | 27 March 2017 | 27 March 2019 | 27 March 2020 | 13,890 | 2,315 | 10.55 | 2,315 |
| | LSPP | 27 March 2018 | 27 March 2019 | 27 March 2020 | 3,460 | 346 | 10.55 | 1,384 |
| | LSPP | 10 May 2018 | 11 May 2019 | 10 May 2023 | 6,584 | 790 | 10.44 | 3,160 |

1 Shares granted to Tanate Phutrakul (March 2015 to March 2019) and Steven van Rijswijk (March 2016 to March 2018) were awarded for their performance in positions prior to their Executive Board appointment.
2 All current Executive Board members participate in ING Group Long Term Sustainable Performance Plan (LSPP) under which plan rules they receive their shares.
3 Deferred share units of Tanate Phutrakul are cash settled instruments. The value of these are based on ING Group's share price at the vesting date. No retention period applies.
4 The (partial) holdback (3,657 and 1,702) of the outstanding deferred variable remuneration, is effectuated on these grants.
5 Number of shares granted includes both deferred and upfront part awarded at the granting date.
6 The balance of unvested shares post holdback, where applicable.

**Total value of vested and unvested shares of Executive Board members - 2019**

| Amounts in euros (rounded figures) | Vested shares | Unvested shares | Share price in euros[1] | Total value |
|---|---|---|---|---|
| Ralph Hamers | 12,525 | 13,522 | 10.68 | 278,000 |
| Tanate Phutrakul | 7,154 | 6,120 | 10.68 | 142,000 |
| Steven van Rijswijk | 6,678 | 6,859 | 10.68 | 145,000 |

1 The opening stock price on 31 December 2019.

## Loans and advances to Executive Board members

The table below presents the loans and advances provided to Executive Board members that were outstanding on 31 December 2019, 2018 and 2017. These loans were provided on market conditions with due observance of the applicable policies within ING.

**Loans and advances to individual Executive Board members - 2019**

| Amount in thousands of euros | Amount outstanding 31 December | Average interest rate | Repayments |
|---|---|---|---|
| Ralph Hamers | 2,402 | 1.4% | 97 |
| Tanate Phutrakul | - | - | - |
| Steven van Rijswijk | - | - | - |

**Loans and advances to individual Executive Board members - 2018**

| Amount in thousands of euros | Amount outstanding 31 December | Average interest rate | Repayments |
|---|---|---|---|
| Ralph Hamers | 2,499 | 1.4% | - |
| Koos Timmermans | 182 | 6.2% | - |
| Steven van Rijswijk | - | - | - |

**Loans and advances to individual Executive Board members - 2017**

| Amount in thousands of euros | Amount outstanding 31 December | Average interest rate | Repayments |
|---|---|---|---|
| Ralph Hamers | 2,499 | 1.4% | - |
| Koos Timmermans | 182 | 6.2% | - |
| Steven van Rijswijk | - | - | - |

## ING shares held by Executive Board members

Executive Board members are encouraged to hold ING shares as a long-term investment to maintain alignment with ING. The table below shows an overview of the shares held by members of the Executive Board on 31 December 2019, 2018 and 2017.

**ING shares held by Executive Board members**

| Numbers of shares | 2019 | 2018 | 2017 |
|---|---|---|---|
| Ralph Hamers | 93,833 | 67,392 | 58,094 |
| Tanate Phutrakul | 9,200 | - | - |
| Steven van Rijswijk | 69,490 | 66,153 | 59,914 |

## 2020 Executive Board remuneration

The Supervisory Board decided to increase the base salary of the Executive Board members by 1.5% as of 1 January 2020. This decision was based on reliable indexation reference points, including the Consumer Prices Index 2020 (forecast) in line with the proposed Executive Board Remuneration Policy 2020. This increase is below the CLA increase in the Netherlands.[4]

For 2020 the following target areas will be taken into account.

Financial
- Profit before tax
- Return on equity

Non-financial
- Customer – Retail primary customers
- People – Organisational Health Index
- Strategy – executing Think Forward Strategy
- Sustainability – Terra
- Regulatory – deliver commitments to regulators (CRO)
- Manage financial and non-financial risk within Board approved risk appetite (CRO)

## Remuneration Supervisory Board

### Supervisory Board remuneration policy

The current remuneration policy for the Supervisory Board, as approved at the AGM on 25 April 2016, aims to:
- Provide a simple and transparent structure
- Bring remuneration levels in line with peers and with levels adequate to attract qualified (international) Supervisory Board members
- Align remuneration with increased responsibilities and time spent.

The Supervisory Board remuneration levels for 2019, similar to 2018, are shown below:

**Supervisory Board remuneration structure**

| Annual fees in euros | 2019 |
|---|---|
| Chairman Supervisory Board | 125,000 |
| Vice chairman Supervisory Board | 95,000 |
| Supervisory Board member | 70,000 |
| Committee fees (annual amounts) | |
| Chairman committee | 20,000 |
| Member committee | 10,000 |
| Attendance fees (per event) | |
| Attendance fee outside country of residence | 2,000 |
| Attendance fee outside continent of residence | 7,500 |

The remuneration of Supervisory Board members is not paid out in equity (i.e. solely cash). Furthermore, Supervisory Board members are not eligible for any variable remuneration. In addition, members of the Supervisory Board are reimbursed for their travel and ING-related business expenses.

4 The collective salary increase based on the Collective Labour Agreement in the Netherlands (agreed for the period from 1 January 2019 – 31 December 2020), per 1 September 2019 was 3% for all employees in the Netherlands. In addition, per 1 September 2020 another collective salary increase of 3% will take place.

## 2019 Remuneration Supervisory Board

The table below shows the remuneration, including attendance fees per Supervisory Board member.

All fees for the Supervisory Board are paid directly by ING, in other words no payments have been made by any of our subsidiaries.

**2019 Remuneration Supervisory Board**

| | 2019 | | 2018 | | 2017 | |
|---|---|---|---|---|---|---|
| Amount in euros (rounded figures) | Remuneration | VAT | Remuneration | VAT | Remuneration | VAT |
| Hans Wijers (chairman) | 167,000 | 35,000 | 153,000 | 32,000 | 35,000 | 7,000 |
| Hermann-Josef Lamberti (vice-chairman) | 141,000 | | 139,000 | | 141,000 | |
| Jan Peter Balkenende | 82,000 | 17,000 | 82,000 | 17,000 | 27,000 | 6,000 |
| Henk Breukink[1] | 33,000 | 7,000 | 104,000 | 22,000 | 105,000 | 22,000 |
| Mariana Gheorghe | 119,000 | | 105,000 | | 94,000 | |
| Eric Boyer de la Giroday | 108,000 | | 108,000 | | 106,000 | |
| Margarete Haase | 98,000 | | 63,000 | | | |
| Mike Rees[2] | 73,000 | | | | | |
| Robert Reibestein | 112,000 | 24,000 | 114,000 | 24,000 | 112,000 | 24,000 |
| Herna Verhagen[3] | 25,000 | 5,000 | | | | |

1 Henk Breukink stepped down as of 23 April 2019. The remuneration figures for 2019 reflect a partial year as a member of the Supervisory Board.
2 Mike Rees was appointed to the Supervisory Board by the 23 April 2019 AGM. His appointment became effective as of the end of the AGM. The remuneration figures for 2019 reflect a partial year as a member of the Supervisory Board.
3 Herna Verhagen was appointed to the Supervisory Board by the 23 April 2019 AGM. Her appointment became effective as of 1 October 2019. The remuneration figures for 2019 reflect a partial year as a member of the Supervisory Board.

Compensation of former members of the Supervisory Board who are not included in the table above amounted to nil in 2019, €69,000 in 2018 and €344,000 in 2017.

## Loans and advances to Supervisory Board members

Supervisory Board members may obtain banking and insurance services from ING Group and its subsidiaries in the ordinary course of their business and on terms that are customary in the sector. The Supervisory Board members do not receive privileged financial services. On 31 December 2019, there were no loans and advances outstanding to Supervisory Board members.

## ING shares and employee stock options held by Supervisory Board members

Supervisory Board members are permitted to hold ING shares as a long-term investment. The table below shows the holdings by members of the Supervisory Board on 31 December 2019, 2018 and 2017.

**ING shares held by Supervisory Board members**

| Numbers of shares | 2019 | 2018 | 2017 |
|---|---|---|---|
| Hermann-Josef Lamberti | 5,700 | 5,700 | 5,700 |
| Eric Boyer de la Giroday | 47,565 | 47,565 | 47,565 |
| Margarete Haase | 800 | 800 | |

The following table contains information on employee stock options outstanding and awards vested for Supervisory Board members.

**Employee stock options on ING Groep N.V. shares held by members of the Supervisory Board on 31 December 2019**

| Number of stock options | Outstanding on 31 December 2019 | Expired in 2019 | Outstanding on 31 December 2018 | Expired in 2018 | Outstanding on 31 December 2017 | Expired in 2017 |
|---|---|---|---|---|---|---|
| Eric Boyer de la Giroday | - | - | – | 113,479 | 113,479 | 113,479 |

## 2020 Remuneration Supervisory Board

The Supervisory Board decided not to change the metrics for 2020.

## General information for all staff

FOR INFORMATION ONLY

The primary objective of ING's remuneration principles is to enable ING to attract, motivate and retain qualified and expert leaders as well as senior staff (including Executive Board members) and other highly qualified employees. Our remuneration principles apply to all employees, including Executive Board members. The approach did not change in 2019.

The principles are an integral part of ING's corporate strategy and risk profile. They maintain a sustainable balance between short and long-term value creation and build on ING's long-term responsibility towards customers, society and other stakeholders.

ING's remuneration principles apply to all staff and are embedded in ING's Remuneration Regulations Framework (IRRF). The IRRF complies with relevant international and local legislation and regulations.

### Our remuneration principles

Our remuneration principles apply to all employees and comprise the following:

**Aligned with business strategy**
ING's remuneration principles are aligned with the business strategy and company goals.

**Creates long-term value**
ING's remuneration principles contribute to long-term value creation and support a focus on the long-term interests of its stakeholders, including employees, customers and shareholders.

**Responsible and fair**
In line with our Orange Code values and behaviours, ING acts responsibly and treats staff fairly across the globe.

**Mitigates risk and optimises controls**
Risk management is an enabler of long-term value creation. ING ensures its remuneration principles are properly correlated with its risk profile and stakeholder interests.

**Performance driven**
ING operates a robust performance management process linked to remuneration to steer and motivate all employees to deliver on its strategic goals, aiming to reward success and prevent rewarding for failure.

**Sustainable**
ING supports the sustainable recruitment, engagement and retention of all employees.

### Performance management

We aim to reward for success and avoid rewarding for failure. That is why ING's remuneration approach is strongly linked to a comprehensive performance management process. Outcomes of performance evaluations provide direct input for remuneration. This does not necessarily mean that performance is directly linked to variable remuneration since within ING not all employees are eligible for variable remuneration. In the Netherlands, for example the vast majority of the employees do not receive any variable remuneration.

Step Up Performance Management is our global performance management approach applicable to the majority of employees. It aims to improve people's individual performance and thereby their team performance and ultimately ING's performance. Step Up Performance Management is one of our people practices that help to increase focus, alignment and transparency. We do this through continuous conversations between managers, employees and teams. To support these conversations, there are three formal moments to discuss performance during the year: target setting, mid-year review and year-end evaluation.

The Step Up Performance Management approach consists of three dimensions:
- Job: the impact employees have in their daily work on an individual and team level, based on factors such as qualitative job description, dynamic planning and specific selected quantitative priorities.
- Orange Code behaviours: how employees do their work and how effective their behaviour is as a professional and colleague. We expect all employees to act in line with ING's Orange Code.
- Stretch Ambitions: at ING, we believe high performance requires stretch and investment (to achieve the stretch). Therefore we ask people to set ambitions beyond their day-to-day role and connect their personal passion, expertise or interest with the long-term success of ING.

All targets are agreed between the employee and their manager, as well as within management teams, to ensure consistency across the bank. ING uses three labels to evaluate performance: excellent, well done and improvement required.

Step Up Performance Management does not prescribe the targets employees should set. However, the following regulatory requirements apply to specific groups:
- For employees eligible for variable remuneration, a minimum of 50% non-financial priorities.
- For all employees in control functions (Legal, Risk, Finance, Compliance, Audit and HR), no individual financial KPIs are allowed, unless required by local law.
- For identified risk takers, risk mitigation measures may lead to a downwards adjustment of the performance outcome and negatively affect variable remuneration (a risk modifier can be applied).

### Total direct compensation

Total direct compensation is the total of fixed and variable remuneration, excluding benefits such as pension and allowances.

ING aims to provide total direct compensation levels for expected business and individual performance which, on average, are at the median of the markets in which we operate, benchmarked against relevant peer groups. In line with the Dutch Banking Code, for the Executive Board and the Management Board Banking we aim for a level below the median. To ensure we adhere to this policy, we regularly monitor and benchmark salary levels across ING.

Fixed remuneration represents a sufficiently high proportion, in line with the level of expertise and skills, and allows a fully flexible variable remuneration award. In case no variable remuneration is awarded, the compensation level is still sufficient for a decent standard of living. Variable remuneration is performance driven, subject to regulatory caps and prevents excessive risk taking, where applicable.

## The comprehensive process around variable remuneration

The awarding of variable remuneration, where applicable, is based on individual, business line and bank-wide performance criteria unless local legislation prescribes otherwise. In all ING countries, we adhere to the applicable variable remuneration caps. In the Netherlands, for example, we apply a variable remuneration cap of 20% with limited exceptions in line with the Dutch Remuneration Policy for Financial Enterprises Act (Wet Beloningsbeleid Financiële Ondernemingen, hereafter 'WBFO').

For Identified Staff (i.e. staff considered to have a material impact on ING's risk profile), at least 40% of variable remuneration is deferred over a period of three to five years with a tiered vesting schedule. Furthermore, at least 50% of variable remuneration is awarded in equity (linked instruments).

### Performance and risk assessment

ING applies measures to mitigate risk relating to variable remuneration. Our global remuneration policy takes into consideration risk, capital, liquidity and the likelihood and timing of earnings. Measures include pre-award and post-award risk assessments of variable remuneration.

In 2019, the Management Board Banking and the Supervisory Board approved the Variable Remuneration Accrual Model (VRAM) set-up and approach for determining the 2019 variable remuneration pool based on the new VRAM formally approved in 2018.

The VRAM takes a holistic view of the overall performance of ING across three key dimensions:

(i) financial,
(ii) non-financial, and
(iii) risk.

Within each of these three elements specific criteria are used to measure performance (e.g. customer, people, strategy, operational excellence, financial and non-financial risk).

The proposal for the variable remuneration pool is prepared by Human Resources, Risk and Finance, and in line with the VRAM principles. The Management Board Banking then proposes the amount of the overall variable remuneration pool to the Supervisory Board, taking into account the advice of the Risk and the Remuneration committees.

The variable remuneration pool (for both individual and collective variable remuneration), encompasses all employees eligible for variable remuneration globally, including Identified Staff. ING takes a multi-step approach to determine whether to award variable remuneration in a given performance year and the maximum amount of the pool. Within this process, a range of risk elements is assessed at various levels and, where appropriate, risk adjustments are made to the variable remuneration pools at both a group and business line level.

### Risk and performance hurdles

To unlock the variable remuneration pools, regulatory and performance hurdles must be met. These are:

- The Common Equity Tier 1 (CET1) ratio must be at or above the threshold established by applicable regulations;
- The Return on Equity (RoE – IFRS-EU) is equal to or higher than the percentage determined at the beginning of each performance year by the Management Board Banking and the Supervisory Board;
- If both the CET1 ratio and RoE are met, the maximum variable remuneration pool is unlocked, as accrued in line with the VRAM; and
- If only one (or none) of the two tests is met, in principle, no bank-wide variable remuneration pool is released.

A variable remuneration pool is also separately accrued for staff in control functions and support functions and for those employees subject to a collective variable remuneration plan. The amount is defined by the Management Board Banking and approved by the Supervisory Board.

### Risk adjustments

In determining the overall size of the variable remuneration pool, a multi-layered, consistent and bank-wide approach to risk tests and adjustments is applied to the process, based on an assessment by the chief risk officer.
To establish appropriate ex ante risk adjustments, there are measures to assess the bank's current and future risks and whether performance sufficiently aligns with risk appetite levels. The risk adjustment assessment includes measurements on 'forward looking' capital, liquidity and non-financial risk, where adjustments are made on deviation from risk appetite.

In addition, ex post risk adjustments are a key element in the process of determining both final variable remuneration pools and individual awards. Here, the chief risk officer may provide additional input at a more granular level to risk adjust (downwards) ING's overall or business line and/or country variable remuneration pools in circumstances where a business line or a specific unit is not performing in line with desired risk parameters or based on events that have a material impact on ING's financial results or reputation.

The ex ante and/or ex post risk adjustments require Supervisory Board approval, taking into account the input of the Risk and Finance functions and the advice of the Risk and Remuneration Committees.

The final risk adjustment measure lies in the individual performance assessment itself. An employee's performance is extensively assessed before variable remuneration is proposed and awarded. Every manager carefully assesses the performance delivered by their individual team members on the basis of pre-agreed performance priorities and in line with the Step Up Performance Management framework. In addition, managers have the discretionary power to lower the proposed variable remuneration if risk taking is perceived as inappropriate. In this way, variable remuneration is aligned with any additional risks identified during the performance year on an individual basis.

Additional risk requirements apply to Identified Staff who are considered risk takers in accordance with CRD IV. These risk requirements set the minimum standards to be met during the performance year. Deviation from these standards may lead to downward adjustment of the variable remuneration, a so-called risk modifier. This process is run independently by the Risk function for which the chief risk officer is ultimately responsible. The Supervisory Board, advised by its Risk Committee, is responsible for Risk Takers within the Management Board Banking.

Finally, a post-award risk assessment can be applied. This assessment analyses whether any events or findings occurred that should lead to a downward adjustment of variable remuneration of previous years by applying a holdback (i.e., forfeiture of up to 100% of the awarded, but unvested, variable remuneration) or clawback (surrender of up to 100% of the paid or vested variable remuneration).

## Shareholders' mandate to exceed 100% variable remuneration cap

ING's remuneration policies comply with international and local legislation and regulations. Under the WBFO (which sets various requirements on remuneration), financial institutions are permitted to set a variable remuneration cap higher than 100% of fixed remuneration for employees outside of the European Economic Area (EEA), provided that the higher cap is approved by shareholders and does not conflict with ING's capital adequacy requirements.

At the 2017 AGM, shareholders approved to apply an increased maximum percentage of up to 200% for employees outside the EEA for a period of five performance years, from 2017 up to and including 2021. ING uses this facility very rarely. In 2019, it was applied to no employees worldwide.

## 2019 specifics

The total amount of variable remuneration awarded to all eligible employees (worldwide) for 2019 was €378 million, compared to total employee costs of €5,755 million. For 2018, the total amount was €303 million and €403 million for 2017. In comparison, the total employee costs in 2018 were €5,420 million and €5,202 million in 2017. Variable remuneration includes both individual and collective variable remuneration such as profit sharing arrangements.

In 2019, eight employees in the Corporate staff, Wholesale Banking and Retail Banking business lines - excluding members of the Management Board Banking - were awarded total annual remuneration (including employer pension contributions and severance payments made) of €1 million or more. In comparison, in 2018 seven employees were awarded total annual remuneration of €1 million or more and 14 employees in 2017.

# Summary and further explanation of the proposed new remuneration policy for the Executive Board and Supervisory Board from 2020

FOR INFORMATION ONLY

## Executive Board: proposed remuneration policy 2020

ING's 2019 EB Remuneration Policy has been in place since 2010, with legal amendments adopted in 2011, 2014, 2015 and 2017, as described above. In line with the Dutch Act on Implementation of SRD II, the Supervisory Board will propose a new Executive Board remuneration policy to shareholders at the 2020 AGM, where it will be subject to a binding approval vote. The full proposal will be provided to our shareholders.

Once adopted by the AGM, the new Executive Board remuneration policy will be effective retroactively from 1 January 2020 until the 2024 AGM at the latest. The remuneration policy is available in full on ING's corporate website https://www.ing.com/remuneration. In case of any differences between this summary and the published Executive Board remuneration policy, the latter is leading. In the event of proposed changes to the new Executive Board remuneration policy, it will be subject to AGM approval.

The objective of ING's new Executive Board remuneration policy is to enable ING to attract, motivate and retain leaders with the ability, experience, skills, values and behaviours to meet ING's strategic priorities and its stakeholder interests. In designing the new Executive Board remuneration policy, many factors were taken into account, such as the amount of fixed and variable remuneration, the performance measures used and, ING’s risk appetite and scenario analyses (taking into account internal pay ratios and stakeholder support).

ING recognises that remuneration is an area of particular interest to stakeholders including shareholders, employees and customers. The Supervisory Board actively engages with stakeholders and takes into account their views as well as ING’s need to attract, motivate and retain leaders with the ability, experience, skills, values and behaviours to meet its strategic priorities and its stakeholder interests.

In line with various regulations, in the course of formulating this policy, the Supervisory Board consulted various stakeholders in meetings, conference calls and through online surveys. Such stakeholders included Retail and Wholesale Banking customers, investors, analysts, rating agencies, shareholder advisory firms, trade unions, employee representatives, regulators, politicians and the current members of the Executive Board.
The Supervisory Board notes that stakeholder views, especially on remuneration, can vary. However, the Supervisory Board values the insight and engagement that these interactions provide, including the expression of different views. This engagement is meaningful and helpful to the Supervisory Board and contributes directly to the advice made by its Remuneration Committee. The feedback received from stakeholders was taken into account when drafting this proposed remuneration policy.

### Governance

The Supervisory Board and the Remuneration Committee are responsible for reviewing the Executive Board remuneration policy at least annually, taking into account regulatory requirements, stakeholder views, ING's benchmark position, internal pay ratios and whether policy incentives take into consideration risk, capital, liquidity and the likelihood and timing of earnings. Following the periodic reviews, the Supervisory Board can propose amendments to the Executive Board remuneration policy. The amended Executive Board remuneration policy will be submitted to shareholders at the AGM for binding approval. In case of no amendments the policy will be submitted to the AGM for approval every four years.
The Risk Committee will, at least, annually review the remuneration policy and may recommend actions to be taken by the Supervisory Board regarding the establishment of a sound Executive Board remuneration policy without prejudice to the tasks of the Remuneration Committee.

## Remuneration components

The individual base salaries are set according to the role, responsibilities and experience of each Executive Board member with reference to market practice. The below factors are given consideration in determining base salaries:

- the individual's level of skill and performance;
- ING's business performance, and market conditions;
- internal pay ratios and salary increases for other ING employees within the wider ING group;
- remuneration level within the external peer group;
- public indexation reference points (e.g. consumer price index);
- stakeholder views.

The Remuneration Committee reviews the individual base salaries of the Executive Board members each year and advises the Supervisory Board on this. Potential future salary increases take into account the factors highlighted above. The Supervisory Board will pro-actively report the base salary development in the Annual Report. If any significant changes to Executive Board base salaries are to be proposed, a stakeholder consultation will be carried out.

In line with the Dutch Banking Code, ING aims for the total direct remuneration of members of the Executive Board to be below the median when benchmarked against comparable positions inside and outside the financial industry, taking into account the relevant international context. In recent years stakeholders have expressed discontent with the use of the EURO STOXX 50 index, which ING has used as a peer group since 2010. This type of benchmark is also unusual compared to the approach taken by peers. As a result, the Supervisory Board has chosen to change the benchmark for ING's proposed new Executive Board remuneration policy to a smaller peer group based on five guiding principles: (i) geography, (ii) relevant talent market, (iii) size, (iv) governance framework and (v) a balancing factor.

The new benchmark is more fitting to ING, incorporating relevant companies rather than an index proxy. Rules and regulations prescribe a mix of comparable relevant Dutch and relevant European financial and non-financial institutions. Given the very different pay structures in the UK and Switzerland we have excluded those institutions from our benchmark. Smaller companies and financial institutions active only in one or two countries were also excluded as they are not comparable in terms of scope and complexity.

With regards to the relevant market for talent, ING increasingly competes with players across sectors and industries. Therefore not only traditional banking competitors are included in the benchmark, but also companies from other industries. This also aligns with the stipulation in the Banking Code.

Size is a significant factor in the dynamics and complexity of a company. Therefore it is important to include companies in the peer group that are broadly comparable in terms of size and complexity. For this, potential peer group companies were assessed on the metrics of market capitalisation (where applicable), number of employees and revenue, with companies considered in the range of one quarter up to four times the size of ING. For general industry peers and for Western-European financial services peers, this ranges from one third up to three times the size of ING.

The applicable governance framework for the company is also seen as a relevant factor. ING is a stock listed company subject to the Dutch financial services regulatory framework, operating within the Dutch stakeholder environment. Therefore the peer group selection is aligned with the Dutch stakeholder environment and/or a financial services regulatory framework.

As a final factor, the Supervisory Board looks at the balance of the peer group, ensuring it keeps sight of relevant peer companies that do not sufficiently match other criteria. This resulted in the inclusion of a number of relevant Dutch peer companies.

The Supervisory Board intends to keep the peer group as stable as possible. Each year the appropriateness of the selected companies will be assessed against the guiding principles, which will not change. The peer group constituents will be reported in the Annual Report.[5]

To drive and reward performance the Executive Board is eligible for annual variable remuneration, in accordance with the applicable regulatory requirements. The amount of variable remuneration is based on actual performance as measured against agreed financial (50%), non-financial (50%) and risk objectives that are consistent with ING's strategy and align with the long-term interests of stakeholders. For the CEO and CFO the applicable performance measures are based on group performance. Under ING's proposed Executive Board remuneration policy, the CRO's performance will be assessed predominantly based on individual functional objectives.

Any variable remuneration awarded to the Executive Board members is fully paid in ING shares. In combination with long-term deferral and holding requirements this ensures alignment with ING's strategy, long-term performance and sustainability goals and with long-term stakeholder interests. For this reason ING does not operate separate short- and long-term incentive plans but rather one plan that has many characteristics of a long-term incentive plan. The amount of variable remuneration awarded to the Executive Board members can range from 0% to 20% of annual base salary.

To mitigate risk relating to variable remuneration, the Risk Committee carries out pre-award and post-award risk assessments of variable remuneration, which may result in a downward adjustment of the variable remuneration at the discretion of the Supervisory Board.

After the performance year, the Supervisory Board reviews performance on the applicable criteria and determines the appropriate variable remuneration amount to be awarded. It uses input and support from the other Supervisory Board committees, such as the Risk Committee and the Audit Committee. The outcomes for each quantitative performance measure are assessed on a linear scale ranging from threshold, target to maximum. The outcomes for qualitative performance measures are assessed using a standard 1-3 rating scale.

The actual individual performance measures and the actual outcome of the review of the performance measures are disclosed retrospectively in the Remuneration Report. The Supervisory Board is of the opinion that the performance measures for the variable remuneration are commercially sensitive and that it would be detrimental to ING to disclose target details at the start of the relevant performance year. We will disclose according to the SRD disclosure requirements.

With respect to pension, Executive Board members participate in ING's general Collective Defined Contribution (CDC) pension plan in the same way as all employees working in the Netherlands without a supplementary pension scheme. Furthermore, Executive Board members are eligible for benefits at a level that the Supervisory Board considers appropriate in the context of the executive's role, specific individual circumstances and benefits offered to the wider workforce and at comparable roles in ING's peer group.

### Contractual arrangements

Members of the Executive Board are appointed by the shareholders at the Annual General Meeting (AGM) for a maximum period of four years. The appointment may be renewed subject to re-election by shareholders (and in line with ING's Articles of Association and applicable rules and regulations).

In principle, in the event of an involuntary exit, the Executive Board member is eligible for a severance payment. If termination of the contract is based on mutual agreement, the Executive Board member is also eligible for severance payment. The arrangements are subject to legal requirements, including being limited to a maximum of one year of fixed base salary and under the condition that there should be no reward for failure.

5 For more information on the peer group composition in 2020, we refer to the additional information on page 159.

### Additional information not included in the Executive Board remuneration policy

Based on these five guiding principles, the selected peer group for 2020 consists of the following 16 companies. Note the guiding principles are part of the remuneration policy. (The list below only relates to 2020):

| | | | |
|---|---|---|---|
| ABN AMRO | Ahold Delhaize | BBVA | Deutsche Bank |
| Aegon | ASML | Banco Santander | Intesa Sanpaolo |
| NN Group | Heineken | BNP Paribas | Société Générale |
| Rabobank | Philips | Crédit Agricole | UniCredit |

Based on compensation data for 2018, compared to the peer group, total direct compensation levels for the CEO amount to approximately 57% of the median (43% compared to the median of the EURO STOXX 50). Total direct compensation levels of the CRO and CFO amount to approximately 81% of the median (63% compared to the median of the EURO STOXX 50).

## Supervisory Board: proposed remuneration policy 2020

The Supervisory Board will propose a Supervisory Board remuneration policy to shareholders at the 2020 AGM, where it will be subject to a binding approval vote. Compared to the existing policy, which was approved at the AGM on 25 April 2016, there are no significant changes other than that the Supervisory Board remuneration will be benchmarked against a new reference market and that the policy is extended to include all relevant requirements of the Dutch Act implementing SRD II. Once adopted, the new Supervisory Board remuneration policy will be effective retroactively from 1 January 2020 until the 2024 AGM at the latest. The remuneration policy is available in full on ING's corporate website https://www.ing.com/remuneration. In case of any differences between this summary and the published Supervisory Board remuneration policy, the latter is leading. If any changes are proposed, the revised Supervisory Board remuneration policy will be subject to AGM approval before becoming effective.

It is important that ING is able to attract members for its Supervisory Board who have the ability, experience, skills, values and behaviours to deliver on the company strategy and goals and support ING's purpose. The Supervisory Board strives to have a diverse composition with regards to gender, ethnicity, nationality and generation. The Supervisory Board remuneration policy therefore aims to (i) be clear and easy, (ii) have remuneration levels in line with peers, (iii) enable ING to attract qualified (international) Supervisory Board members and (iv) align remuneration with responsibilities and time spent.

### Governance

The Remuneration Committee is responsible for annually reviewing the Supervisory Board remuneration policy and making recommendations to the Supervisory Board on amendments. The review takes into account at least the following: (i) ING's benchmark position, (ii) stakeholders' views on remuneration and (iii) regulatory requirements. Following the periodic review, the Supervisory Board can propose amendments to the Supervisory Board remuneration policy to the General Meeting for adoption. In the event of no amendments the policy will be submitted to the General Meeting for adoption every four years.

### Remuneration components

As often as appropriate, but at least every four years, the total fees for Supervisory Board members are reviewed against comparable positions in the market. Under the proposed new Supervisory Board remuneration policy, the Supervisory Board will use an updated benchmark, similar to the benchmark proposed for the Executive Board. This benchmark is periodically determined by the Supervisory Board and based on the following peer group guiding principles: (i) geography, (ii) relevant talent market, (iii) size, (iv) governance framework and (v) a balancing factor. In the benchmark exercise ING's position is for Supervisory Board member's fees to be below the median. The peer group will be disclosed annually in our Annual Report.

The remuneration structure of the Supervisory Board members reflects the roles and responsibilities of individual Supervisory Board members. All fees for Supervisory Board members are paid out fully in cash. No variable remuneration is provided to ensure that the Supervisory Board members can maintain independence. Additionally, the Supervisory Board members are not eligible for retirement benefits nor for any other benefits in relation to their position on the Supervisory Board.

# Works Councils

## Central works council Bank (COR) December 2019

E. (Edward) Boeijenga, ***chairman***
B.M. (Bouke) van den Berg
A. (Arend) Nijenhuis, ***deputy chairman***
Y.J. (Yvonne) Vork ***(works council support)***
J.P. (Jan) Driessen
H. (Hendrika) Hey
N.C. (Nienke) Kuijlaars-van Bekkum
I.M. (Michiel) van Lagen
L.T. (Ludy) Limburg
S. (Sofiane) Maktouf
M.T. (Marinus) Stoffers
M. (Marcel) de Valk
R.A.W. (Radboud) Vanlerberghe

## European works council December 2019

**Austria:** Otmar Haneder, (deputy Ernst Szoeke)
**Belgium:** Herman van Eesbeek, Franck Goethals, Ahmed Sanhayi, Jan Claude Van den Abeele, Erwin Veestraeten
**Bulgaria:** Andrew Nitov, Biliana Petrova-Yaneva
**Czech Republic:** Martina Žatecká
**France:** Frederic Thomas
**Germany:** Andre Fioritto, Ulrich Probst, Tatjana Sturm
**Hungary:** Géza Bodor ***(chairman)***
**Italy:** Sami Zambon, Claudio Casazza
**Luxembourg:** Fabrizio Parisi
**Netherlands:** Jaap van Amsterdam ***(vice secretary)***, Mariana Gomez de la Villa, Sofiane Maktouf, Jeroen van der Veer ***(deputy chairman)***, Jordi Leber
**Poland:** Mariusz Cieslik, Arthur Banasik, Rafal Bednarski
**Romania:** Adrian Piscu, Vlad Pop ***(secretary)***
**Slovakia:** Julius Kis
**Spain:** Monica de la Viuda Valverde, Beatriz Garcia Trujillo
**United Kingdom:** Daniel Bennett, Glennis Buckley
**Works council support:** Karin van de Schouw, Petra Cortel

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# ING Group Risk Management

As a global financial institution with a strong European base, offering banking services, ING is exposed to a variety of risks. We manage these risks through a comprehensive risk management framework that integrates risk management into daily business activities and strategic planning. This safeguards ING Group's financial strength by promoting the identification, measurement and control of risks at all levels of the organisation. Taking measured risks is the core of ING's business.

The risk management function supports the Executive Board in formulating the risk appetite, strategies, policies and limits. It provides review, oversight and support functions throughout ING on risk-related items. ING's main financial risks exposures are to credit risk (including transfer risk), market risk (including interest rate, equity, real estate, credit spread, and foreign exchange risks), funding & liquidity risk and business risk. ING Group is also exposed to non-financial risks, including operational, IT and compliance risks, as well as to model risks. The ING Group Chief Risk Officer (CRO) is also the CRO of ING Bank.

This section sets out how ING manages its risks on a day-to-day basis. It explains how the risk management function is embedded within the organisation based on the 'three lines of defence'. It describes the key risks that arise from ING's business model and how these are managed by dedicated risk management departments, with various specific areas of expertise. The section provides qualitative and quantitative disclosures about credit, market, funding & liquidity, business, operational, IT, compliance and model risks.

### Basis of disclosures

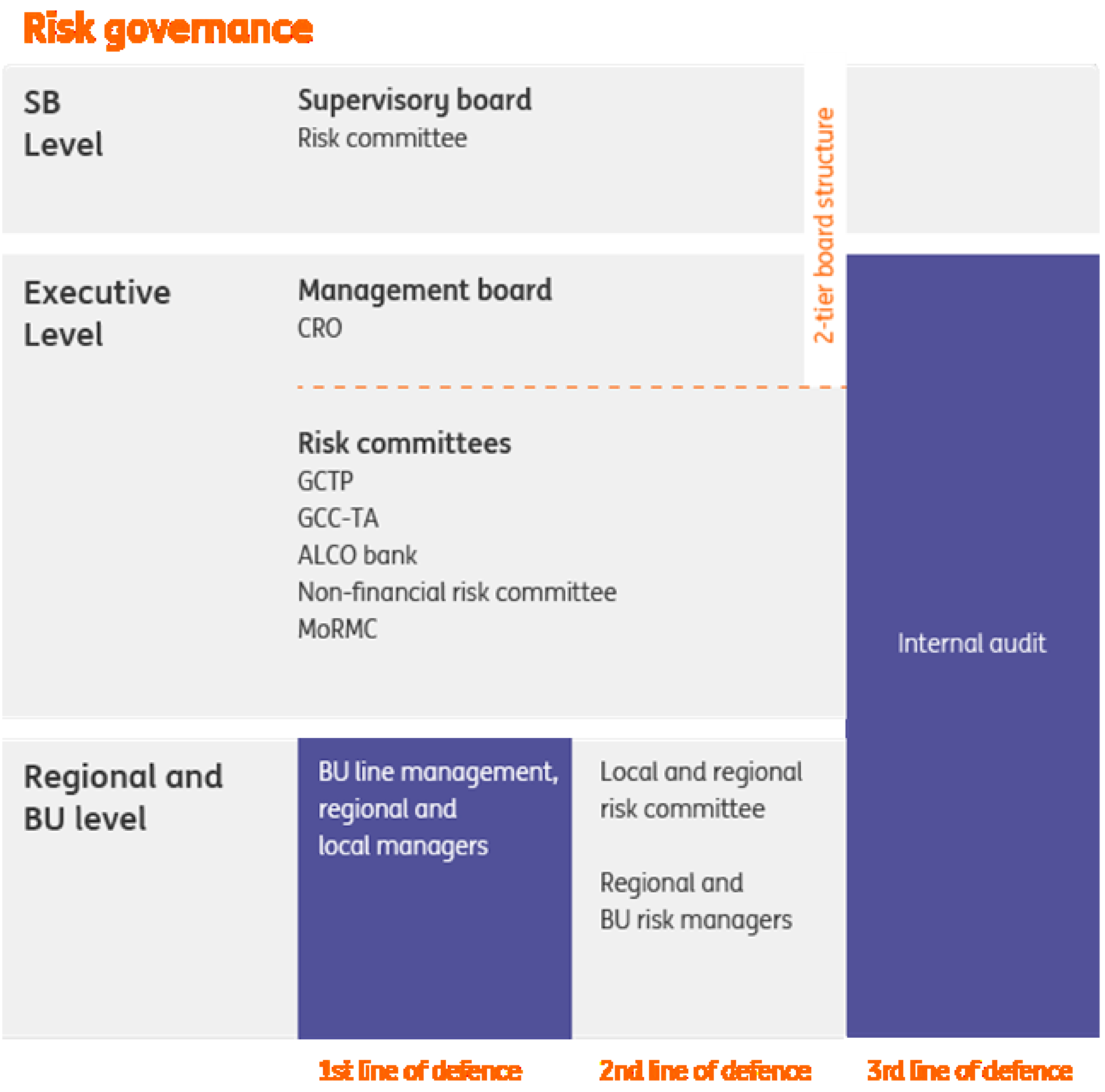
The risk management section contains information relating to the nature and the extent of the risks of financial instruments as required by International Financial Reporting Standards (IFRS) 7 'Financial Instruments: Disclosures'. These disclosures are an integral part of ING Group Consolidated financial statements and are indicated by orange brackets.

This risk management section also includes additional disclosures beyond those required by IFRS-EU standards, such as certain legal and regulatory disclosures. Not all information in this section can be reconciled back to the primary financial statements and corresponding notes, as it has been prepared using risk data that differs to the accounting basis of measurement. Examples of such differences include the exclusion of accrued interest and certain costs and fees from risk data, and timing differences in exposure values (IFRS 9 models report expected credit loss on underlying exposures). Disclosures in accordance with Part Eight of the CRR and CRD IV, and as required by the supervisory authority, are published in our 'Additional Pillar III Report', which can be found on our corporate website ing.com.

## Risk governance

Effective risk management requires firm-wide risk governance. ING's risk and control structure is based on the 'three lines of defence' governance model, whereby each line has a specific role and defined responsibilities in such a way that the execution of tasks is separated from the control of these same tasks. At the same time, they have to work closely together to identify, assess, and mitigate risks. This governance framework is designed such that risk is managed in line with the risk appetite as approved by the Management Board Banking (MBB), the Executive Board (EB) and the Supervisory Board (SB), and is cascaded throughout ING. The MBB is composed of the Executive Board of ING Group,the heads of the business lines and the chief operating officer.

The heads of ING's banking business & support functions and the heads of the country units, or their delegates, are the first line of defence. They have the primary ownership, accountability and responsibility for assessing, controlling and mitigating all financial and non-financial risks affecting their businesses, and, for the completeness and accuracy of the financial statements and risk reports with respect to their responsible areas. The COO is responsible and accountable for proper security and controls on global applications and IT platforms servicing the Bank and implementing proper processes.




The second line of defence consists of oversight and specialised functions in risk management and compliance, and includes at least the control functions Risk and Compliance. They (i) have co-responsibility for risk management, through articulating and translating the risk appetite into methodologies and policies to support and monitor business management's control of risk, (ii) objectively challenge risk management execution and control processes and coordinate the reporting of risks and controls by the first line of defence, (iii) advise management on risk management and compliance and have decision-making power in relation to business activities that are judged to present unacceptable risks to ING and (iv) can set minimum requirements in terms of quality and quantity of global resourcing in the risk management and compliance functions.

The internal audit function forms the third line of defence. It provides an independent assessment of the effectiveness of internal controls over the risks to ING's business processes and assets, including risk management activities performed in both the first and second lines of defence. To protect its independent nature, decisions regarding the appointment, re-appointment or dismissal from office as well as the remuneration package of the head of the internal audit function require supervisory board approval.

The next graph illustrates the different key senior management level committees in place in the risk governance structure.

### Board level risk oversight

ING has a two-tier board structure consisting of a management board (EB for ING Group and MBB for ING Bank) and the SB; both tiers play an important role in managing and monitoring the risk management framework.

- The SB is responsible for supervising EB and MBB policy, the general course of affairs of ING Group, ING Bank and its business (including its financial policies and corporate structure). For risk management purposes the SB is advised mainly by the Risk Committee, which assists and advises in monitoring the risk profile and approving the overarching risk appetite of the company

as well as the structure and effective operation of the internal risk management and control systems.
- The EB is responsible for managing risks associated with all activities of ING Group, whereas the MBB is responsible for managing risks associated with all activities of ING Bank. The EB and MBB responsibilities include ensuring that internal risk management and control systems are effective and that ING Group and ING Bank comply with relevant legislation and regulations. On a regular basis, the EB and MBB report on these issues and discuss the internal risk management and control systems with the SB. On a quarterly basis, the EB and MBB report on ING's risk profile versus its risk appetite to the Risk Committee, explaining changes in the risk profile.

As a member of the EB and the MBB, the CRO is responsible for ensuring that risk management issues are heard and discussed at the highest level. The CRO steers a risk organisation both at head-office and business-unit levels, which participates in commercial decision-making, bringing countervailing power to keep the agreed risk profile within the risk tolerance. The CRO reports to the SB committees on ING's risk appetite levels and on ING's risk profile at least quarterly. In addition, the CRO briefs them on developments in internal and external risk-related issues and seeks to ensure they understand specific risk concepts.

### Executive level
The key risk committees described below act within the overall risk policy and delegated authorities granted by the MBB:

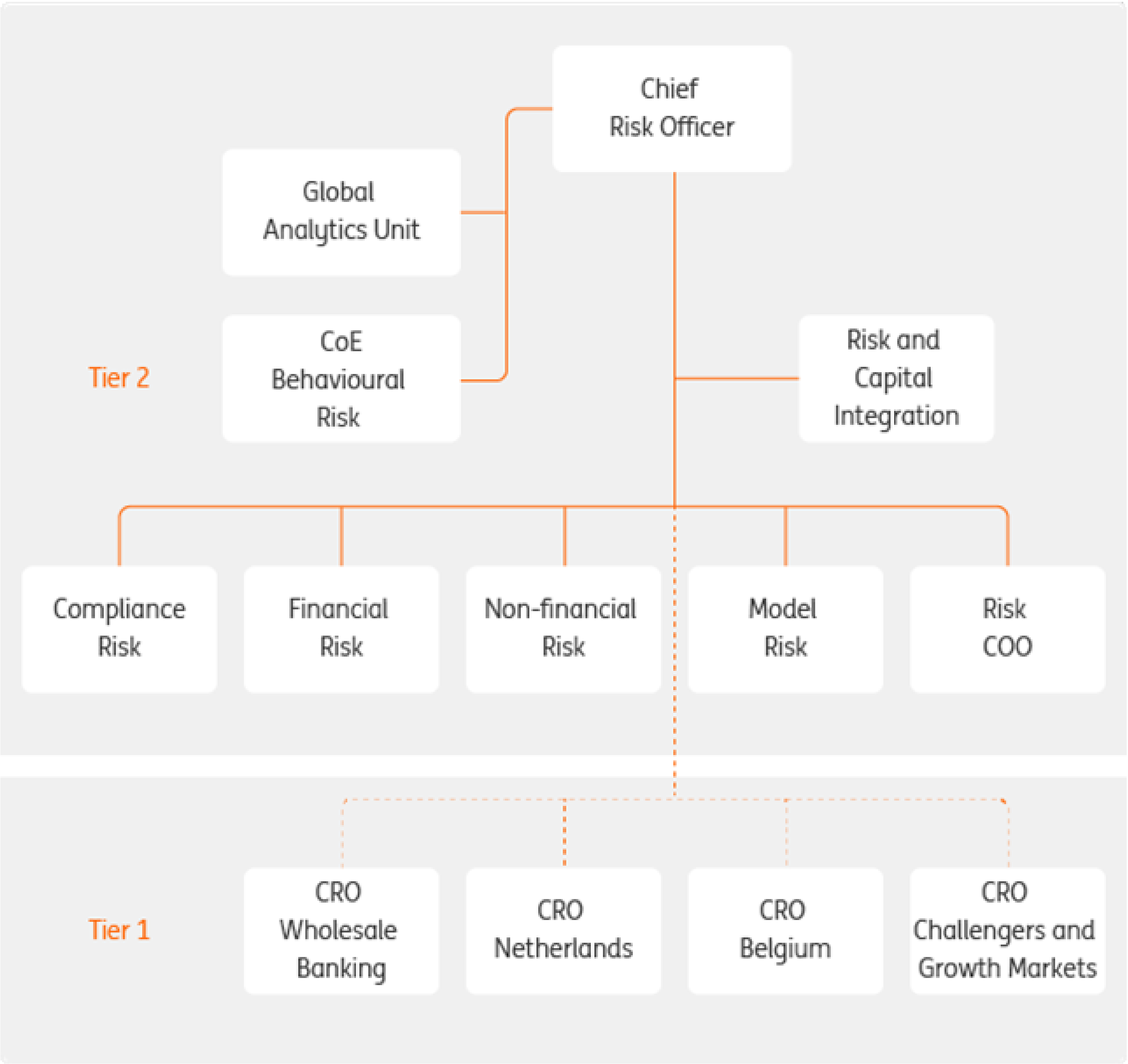
- Global Credit & Trading Policy Committee (GCTP) discusses and approves policies, methodologies, and procedures related to credit, trading, country, and reputation (i.e. environmental and social risk or ESR) risks. The GCTP meets on a monthly basis. After the MBB and the GCTP, the Credit & Trading Risk Committee (CTRC) is the highest level body authorised to discuss and approve policies, methodologies, and procedures related to credit risk;
- Global Credit Committee – Transaction Approval (GCC(TA)) discusses and approves transactions that entail taking credit risk (including investment risk), country, legal, and ESR risk. The GCC(TA) meets twice a week;
- Asset and Liability Committee Bank (ALCO Bank) discusses and steers, on a monthly basis, the overall risk profile of all ING Bank's balance sheet and capital management risks. ALCO Bank discusses and approves policies, methodologies and procedures regarding solvency, market risk in the banking book and funding and liquidity risks;
- Non-Financial Risk Committee Bank (NFRC Bank) is accountable for the design and maintenance of the Non-Financial Risk Management Framework including Operational Risk Management, Compliance and Legal policies, minimum standards, procedures and guidelines, development of tools, methods, and key parameters (including major changes) for risk identification, measurement, mitigating and monitoring/ reporting. NFRC Bank meetings are at least quarterly; and
- The Model Risk Management Committee (MoRMC) aims to align overall model strategy, model risk appetite, supporting model frameworks, policies and methodologies.

### Regional and business unit level
ING's regional and/or business unit management have primary responsibility for the management of risks (credit, market, funding and liquidity, operational, IT and compliance risks) that arise in their daily operations. They are accountable for the implementation and execution of appropriate risk frameworks affecting their businesses in order to comply with procedures and processes at the corporate level. Where necessary, the implementation is adapted to local requirements. The regional and/or business unit CROs are involved in these activities. The local (regional and BU) CRO is responsible for the analysis, control and management of risks across the whole value chain (from front to back office). The local risks are discussed in local risk committees that roll up to the key risk committees at executive level. Local Client Integrity Risk Committees (CIRCs) assess client integrity risk and they have a final decision on client acceptance or client off-boarding, from a risk-based perspective, in the areas of Financial Economic Crime (FEC), Foreign Account Tax Compliance Act (FATCA), Common Reporting Standards (CRS) and ESR.

## Risk management function

### Organisational structure
Over the past years, banks have been faced with regulatory and public pressure with regard to their risk management policies, processes, and systems. A raft of new requirements and regulations has been introduced and implemented. To address these internal and external (market and regulatory) developments and challenges effectively, ING regularly reviews the set-up of its risk-management organisation. This allows for better support of the Bank's Think Forward strategy and enhances the interconnectedness of the risk oversight responsibilities in business units with global risk functions. The organisation chart illustrates the reporting lines in 2019 for the risk organisation:

**Risk function**




### Risk policies, procedures and standards
ING has a framework of risk management policies, procedures, and minimum standards in place to create consistency throughout the organisation, and to define requirements that are binding to all business units. The goal of the governance framework of the local business units is to align with ING's framework and to meet local (regulatory) requirements. Senior management is responsible for the implementation and adherence to policies, procedures and standards. Policies, procedures, and standards are regularly reviewed and updated via the relevant risk committees to reflect changes in requirements, markets, products and practices.

### Internal Control Framework
ING has organised its Internal Control Framework (ICF) with the objective to translate policies and control objectives into consistent standards and controls in the business lines and as such support and promote an effective risk and control environment. The framework includes binding principles, definitions, process steps and roles and responsibilities to create consistent bank-wide policies and standards.

The scope of the ICF is the development and maintenance or update of global internal control documents: policies, minimum standards, product control frameworks, support control frameworks and process-related control standards. These global documents are designed by head office functions and are to be adhered to by entities and support functions. Domain ownership of policies and minimum standards is with the 2nd Line of Defence, whereas product and support control frameworks are owned by the 1st Line of Defence and are approved by 2nd line of Defence. Process control standards can be owned by both 1st and 2nd Line of Defence, related to the underlying processes involved.

Domain owners are responsible for a specific risk domain and aim that their internal policies and standards do not overlap with other documents. The ICF aims for single testing for multiple purposes meaning that the same control should not have to be tested more than once for different functions. This means that the test results of one control can be used for more than one sign-off.

The principal role of the independent ICF gatekeeper function is that of a quality assurance role and to provide advice for approval to the SB, EB, MBB and NFRC Bank. The ICF gatekeeper challenges the alignment of the internal control documents with the agreed methodology and taxonomy and verifies that the process of development and communication of internal control documents is executed in adherence to the process as described below. The ICF gatekeeper is the guardian of the ICF binding principles.

The process of developing internal control documents is standardised for each type of internal control document. Domain owners should adhere to the standardised process that includes the following steps: domain owner identification, risk-based approach, impact assessment, approval body and involvement of local entities for sounding on key and expected controls. The gatekeeper oversees the steps above.

All policies, procedures and control standards are published on ING's intranet and new and updated documents are periodically communicated by means of a policy update to all country senior managers and heads of business departments.

### Risk model governance and validation

Risk models are built according to ING's internal risk modelling methodology standards and model life cycle. After the review and documentation of each model by the Model Development (MD) and Model Risk Management (MoRM) departments, dedicated risk committees approve new and changed models. After approval by the applicable risk committee, and where necessary by the regulator, the risk model is implemented. MoRM re-validates models on a regular basis. Validation results and capital impacts are reported on a quarterly basis to senior management, the risk committees and the supervisor.
The MoRM department is one of the cornerstones of ING's risk model governance. The department sets and maintains a model risk framework containing (1) the governance setting out the responsibilities; (2) the model risk appetite; (3) model risk management policies and standards; and (4) the model management inventory and tooling. MoRM monitors global model risk and model performance.

The validation teams provide independent model validation, which starts with the determination that a model is appropriate for its intended use. This is followed by an on going process whereby the reliability of the model is verified at different stages during its lifecycle: at conception, before approval, periodically after implementation and when significant changes to the model are made. The validation process contains a mix of developmental evidence assessment, process verification and outcome analysis. When model validation identifies model risks, it provides recommendations to address those.

## Risk culture

The reputation and integrity of ING's organisation are core elements to operate successfully in the financial world. ING's risk culture promotes awareness of collectively shared values, ideas and goals, but also of potential threats and aligns the individual performance objectives with the short- and long-term strategy. ING therefore aims to make risk responsibilities transparent within the different levels of the organisation and to hold every employee accountable for his/her actions.

## Orange Code

Commonly seen as norms and traditions of behaviour of individuals and of groups within an organisation, risk culture determines the way in which employees identify, understand, discuss, and act on the risks the organisation is confronted with and the risks it takes. This is a continuous long-term commitment and journey. In this respect, The Orange Code is a declaration of who we are. It describes what we can expect from each other when we turn up to work each day. It is a set of standards that we collectively value, strive to live up to, and invite others to measure us by.

The Orange Code is the sum of two parts, the ING values and ING behaviours, with integrity being the overarching principle. The ING values (being honest, prudent and responsible) are designed to be non-negotiable promises we make to the world, principles we seek to stick to, no matter what. The ING behaviours (take it on and make it happen, help others to be successful, and always be a step ahead) represent our way to differentiate ourselves. The Orange Code is embedded in commitments we make to each other and the standards by which we will measure each other's performance.

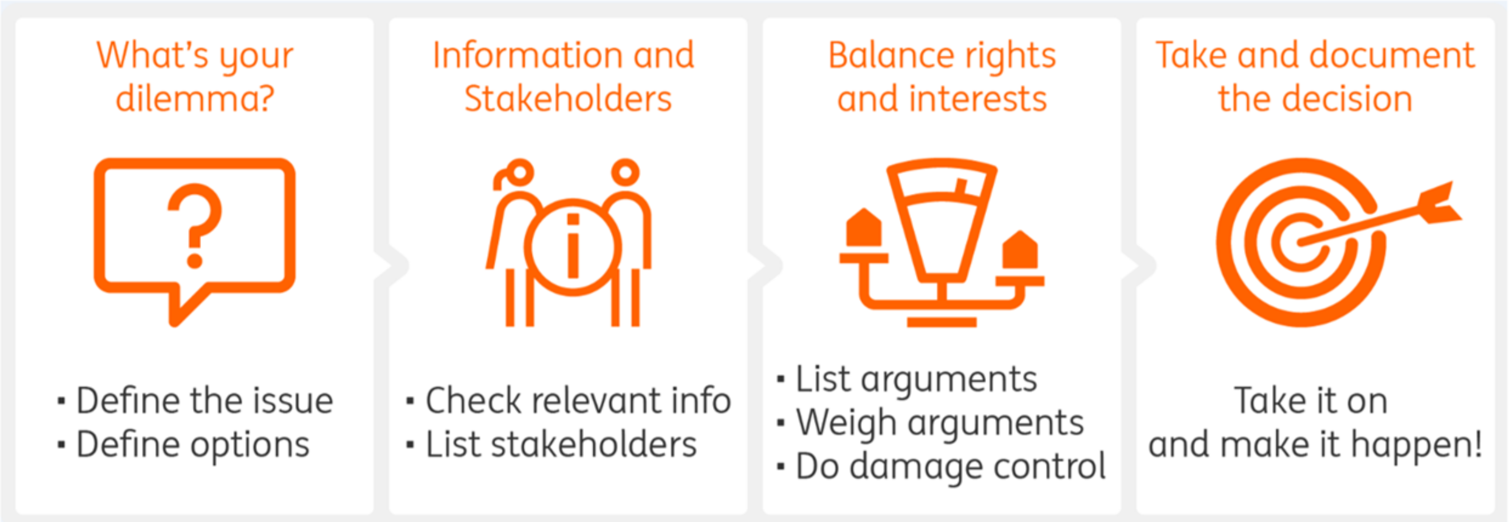
Risk awareness is about being alert to potential threats that can occur during day-to-day business, which can be specific to the sector, the region or the clients ING is doing business with. To support the further embedding of risk culture into business practices, ING has initiated different programmes and issued several guidelines.

To reinforce the values and behaviours in our Orange Code, which puts integrity above all, we invite all employees to participate in e-learnings that aim to equip them to make the right decisions when faced with a dilemma or issue. In 2019, we commenced the creation of new e-learnings on anti-competitive conduct, anti-bribery and corruption and data protection for launch early 2020. We also developed a global code of conduct that builds on the Orange Code and sets the standards we expect our people to uphold. This global code of conduct was launched during 1Q 2020.

## Orange Code dilemma dialogue

To enhance risk awareness we continued to support the business in the area of risk culture and monitor compliance risk. This included training by compliance and data experts to enhance balanced decision-making in line with the Orange Code dilemma model (introduced in 2017) to support well-balanced and integrity-led decision-making. This four-step model helps to delay judgment and aims to find out where the moral weight lies for a potential decision.

The model is already embedded in some decision-making processes (such as the data ethics governance process) and we are exploring how to embed it in other decisive governance processes within the bank. During early 2019 around 30 compliance officers were trained globally to support the organisation in properly applying the model in practice in their respective countries.




## Global data ethics and the I-for-integrity programme

Other initiatives such Global Data Ethics and the I-for-integrity programme within the Netherlands and Belgium are continuing. In addition, new employees undergo a series of e-learnings on topics such as KYC, compliance, dealing with dilemmas, data risk and integrity in practice.

We also introduced a new global learning model in 2019 to further professionalise Compliance, KYC and risk training. It introduces governance, a board to approve trainings based on business needs, global planning and greater cooperation between content owners, learning experts and corporate communications teams to ensure the best fit for the training need. In addition, a Risk Academy was set up for people working in risk, with the aim of eventually bringing Risk training to a broader audience if necessary.

## Banker's Oath

In the Netherlands, employees of all financial institutions – and that includes ING – are required to take the Banker's Oath. This requirement came into force on 1 April 2015 as part of the joint approach from all banks, known as 'Future-oriented Banking.' The introduction of social regulations, the revision of the Dutch Banking Code, and the implementation of a Banker's Oath (with the associated rules of conduct and disciplinary law), are a way for Dutch banks to show society what they stand for and are accountable for, as both individual banks and as a sector.

## Remuneration

ING aims to align its remuneration policy with its risk profile and the interests of all stakeholders. For more information on ING's compensation and benefits policies and its relation to the risk taken, please refer to the 'Capital Requirements Regulation (CRR) Remuneration disclosure' published on the corporate website ing.com. https://www.ing.com/About-us/Annual-reporting-suite.htm

## Centre of Expertise on Behavioural Risk

Behavioural Risk Management (BRM) is a new expertise that has been added to ING's global Risk organisation. Behavioural risk is an increasingly important risk area for ING and across the financial industry. It arises when behavioural patterns are at the root of financial and non-financial risks in the organisation.

The complexity of this type of risk is less tangible compared to other risk areas. It is about how decisions are made, how people communicate and whether they can take ownership. Behaviour is motivated by formal and informal drivers. Examples of formal drivers are the processes ING applies and how its governance is structured. Informal drivers are less tangible, such as group dynamics or underlying beliefs that influence behaviour.
At ING, BRM is positioned in the second line of defence, reporting directly to the chief risk officer. The global BRM Centre of Expertise, set up in 2018, not only assesses behavioural risk in the organisation, but also has the mandate to direct, challenge and support business owners to intervene on high-risk behaviours and their underlying drivers.

### Behavioural risk assessments

Behavioural risk assessments identify, analyse and mitigate high-risk behaviours within ING and provide management with specific direction on how to change these behaviours. They focus on the effectiveness of groups rather than individuals, the role of leadership and on less visible aspects such as team dynamics and unwritten social norms. The goal is to understand and systematically assess what drives undesired habits at ING. The BRM model of behavioural risk will be used as the standard across ING to signal behavioural risks going forward.

In 2019, the outcomes of the first behavioural risk assessments were shared with senior leaders at ING's International Conference in March and with the relevant departments. These were primarily teams involved in Know Your Customer activities in the Netherlands, US and Philippines. Based on these outcomes, a number of interventions have been implemented with the goal to change high-risk behavioural patterns.

Behavioural risk assessments were also carried out in Belgium and the interventions based on these outcomes will be implemented in 2020. The BRM team will continue to assess behavioural risk, focusing predominantly on KYC.


### Behavioural risk interventions

Effective mitigation requires a deep understanding of what drives undesired behaviours. Theory and evidence-based techniques and tools developed in behavioural science play an important role in designing and evaluating interventions. These interventions impact all levels of the organisation.

Employees are invited to participate in 'nudge labs' where they work together to identify small behavioural changes that can have a positive impact on processes and collaboration.

Given the crucial role of leaders in creating the right conditions for employees, interventions are first initiated at leadership level. These include leadership labs, which address topics such as 'governance and ownership' and 'alignment and trust', as well as bringing together the 'whole system in the room'. Here senior leaders delve into the outcomes of the assessments, identifying deeply rooted and often complex issues for improvement.

The BRM team works closely with the business units and departments such as HR, Audit, and Compliance to align on and embed desired leadership and risk behaviours (i.e. speak up, psychological safety, communication, guiding leadership).

## Risk profile

This chart provides high level information on the risks arising from ING's business activities:

### Risk cycle process

ING uses a step-by-step risk management approach to monitor, manage and mitigate its financial and non-financial risks. The approach consists of a cycle of five recurrent activities: risk identification, risk assessment, risk control, risk monitoring, and risk reporting. In short, this implies: determining what the risks are, assessing which of those risks can really do harm, taking mitigating measures to control these risks, monitoring the development of the risk to see if the measures taken are effective, and reporting the findings to management at all relevant levels to enable them to take action when needed.

The recurrence is twofold. Firstly, the identification, assessment, review, and update of mitigating measures are done periodically. Secondly, the periodic monitoring exercise may indicate emerging risks, known risks that are changing, risk levels that are changing, or current control measures that are not effective enough. Further analyses of these findings may result in renewed and more frequent risk identification, and/or assessment, and/or change of mitigating measures.

### Risk identification

Risk identification is a joint effort of the business and the risk management functions. Its goal is to detect potential new risks and determine changes in known risks. Regular risk identification is essential for effective risk management. Potential risks that are not identified, will not be controlled and monitored and may lead to surprises later. Known risks may have changed over time and as a consequence the existing mitigating measures and monitoring may be inadequate or obsolete.

Risk identification is performed periodically. In case of material internal or external change, additional ad-hoc risk identification can be performed.

### Risk assessment

Each identified risk is assessed to determine its importance. This enables ING to decide which of the identified risks need control measures and how strict or tolerant these measures should be. Known risks are re-assessed to detect any change in the risk level.
The importance of a risk is based on the likelihood that the risk materialises and the subsequent financial or reputational impact that may occur should the risk arise. Unlikely risks with a potentially high impact need to be controlled. A risk that is likely to happen regularly but expected to have a modest financial impact may not need to be mitigated if the consequences are accepted by management.

### Risk control

Risks can be controlled by mitigating measures that lower the likelihood the risk occurs, lower the impact when it occurs or both. The ultimate measure to lower a risk is to stop the activity or service that causes the risk (risk avoidance). Risk control and mitigation measures are defined and maintained at both the bank-wide and local level.

### Monitoring and reporting

ING monitors the risk control measures by checking if they are executed, complied with and have the expected mitigating effects and by following the development of the risks and their risk levels. Risk reporting provides senior and local management with information needed to manage risks.

## Risk Appetite Framework

The Risk Appetite Framework (RAF) is one of the pillars of the Enterprise Risk Management (ERM) Framework. Its objective is to set the appropriate risk appetite at the consolidated level across the different risk categories and to allocate the risk appetite throughout the organisation.

The RAF policy states the overarching global risk appetite. Within the RAF, ING monitors a range of financial and non-financial risk metrics to ensure that our risk profile is in line with our risk appetite while executing our strategy. ING's RAF, which is approved by the Supervisory Board (SB), defines our desired risk profile that is integrated in the strategic decision-making and financial planning process. It is designed to be able to withstand market volatility and stress, while meeting regulatory requirements. The framework including underlying assumptions and metrics, is regularly reviewed so that it remains relevant. The RAF combines various financial and non-financial risk appetite statements into a single coordinated approach to provide the business with a clear overview of the relevant risks and the tools to manage them. This view allows the Executive Board (EB), the Management Board Banking (MBB) and senior management to form an opinion on the adequacy of internal risk management and control systems for the risks ING faces while pursuing its strategy.

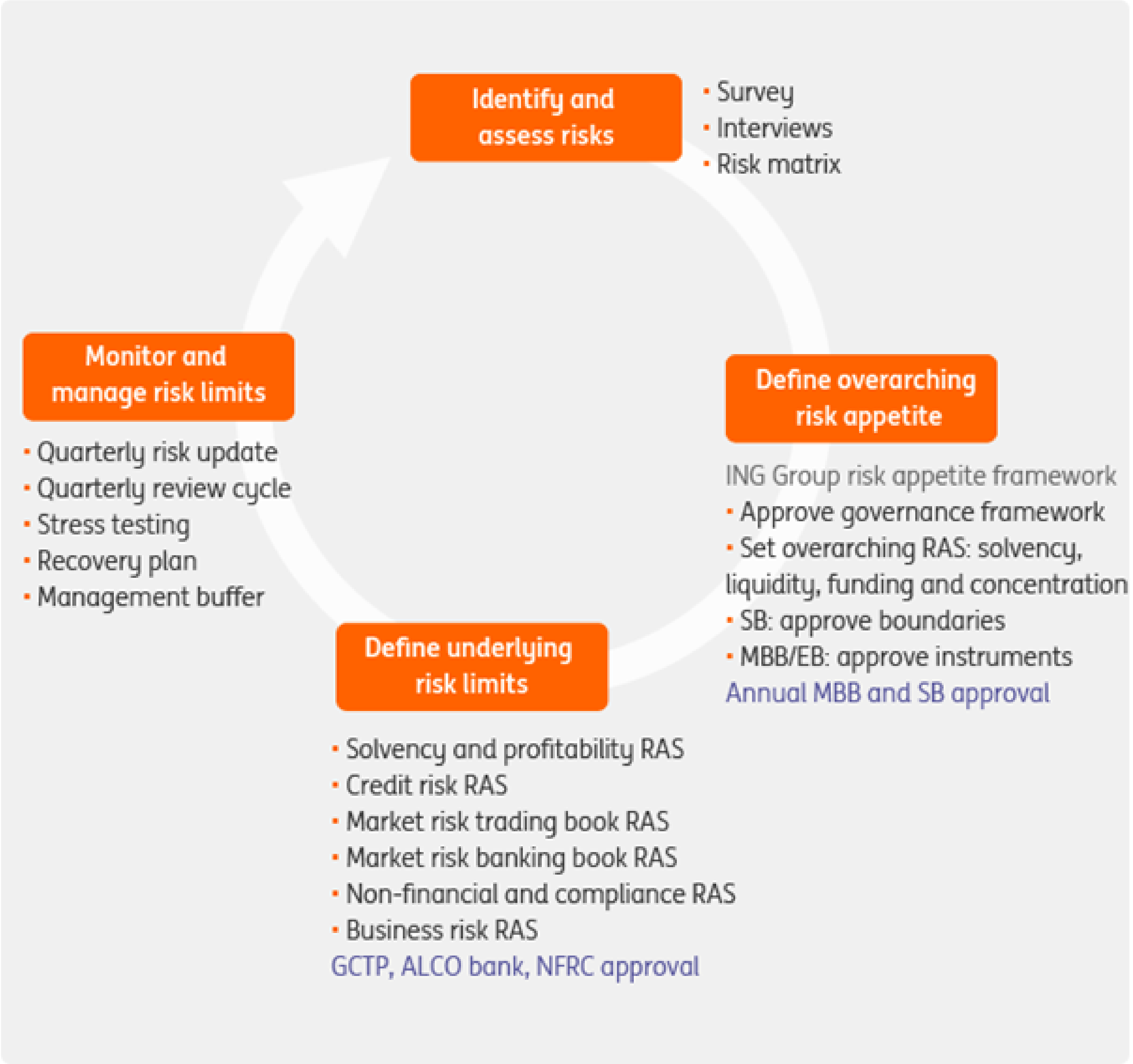
### Process

The RAF is focused on setting the risk appetite at the consolidated level and across the different risk categories, and provides the principles for cascading this risk appetite down into the organisation. The RAF and underlying limit allocation is reviewed on an annual basis, or more frequently if necessary, based on their quarterly review in the EB, the MBB and the SB. It is therefore a top-down process, which bases itself on the ambition of the bank in terms of its risk profile and is a function of the capital and liquidity levels, the regulatory environment, and the economic context. The set of limits used are split based on the approval level needed for them. The limits that need SB approval are called Boundary and the underlying metrics supporting the boundaries which need EB and MBB approval are called instruments.

### Step 1. Identify & assess ING's key risks

The outcome of the risk identification & risk assessment process is used as starting point for the review of the RAF. Within this step the risks ING is facing when executing its strategy are identified, it is assessed if the potential impact is material and if it is controlled within ING's risk management function; benchmarking current risk framework versus regulatory developments; re-assessing known risks to confirm risk level or detect potential changes; and reflecting on the current set of Risk Appetite Statements

## Risk appetite framework process



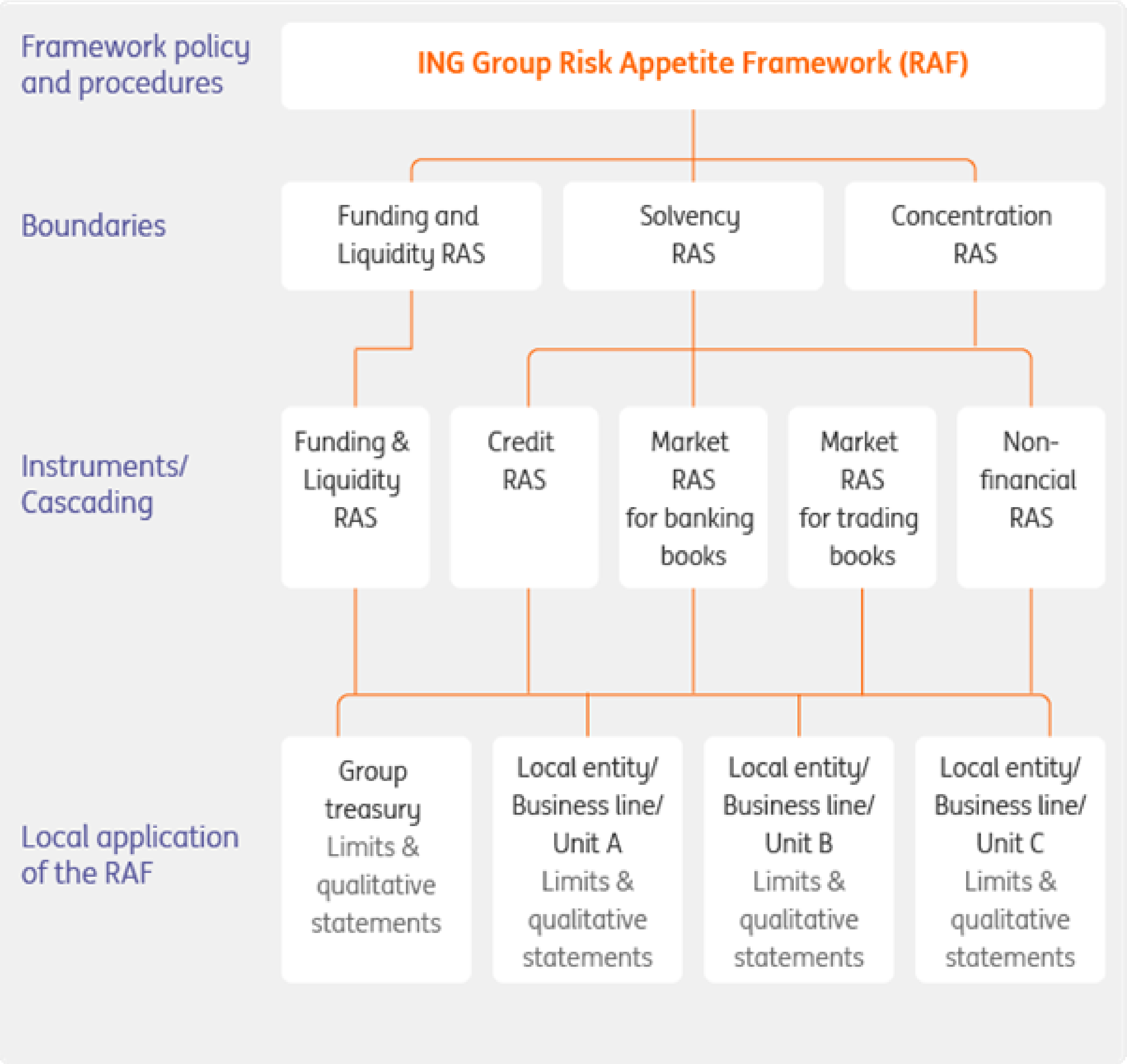
### Step 2. Set Risk Appetite Framework

Based on ING's risk assessment and risk purpose, boundary for the overarching risk frameworks are set. Once the overarching risk appetite thresholds have been set and approved by EB/MBB and subsequent SB, the statements are translated into risk-type specific statements and lower level thresholds which are set and approved by senior risk committees ALCO Bank, GCTP and NFRC Bank. Cascading is done via a number of detailed risk appetite statements which have been defined per risk type, the combination of which ensure compliance with the overarching Solvency, Concentration and Funding & Liquidity RAS.

### Step 3. Cascade into statements per risk type and business unit

The bank-wide risk appetite is translated per risk type, which is further cascaded into the organisation to the lowest level. Risk appetite statements are then translated into dedicated underlying risk limits that are used for the day-to-day monitoring and management of ING's risks. The suite of risk appetite statements serve as inputs for the quarterly planning process as well as for the establishment of key performance indicators and targets for senior management.

### Risk appetite framework policy



**Risk Appetite Statements**

| Boundaries | Underlying risk metrics |
|---|---|
| Funding & Liquidity | Liquidity Coverage Ratio<br>Net Liquidity Position – internal stress test |
| Solvency | CET1 ratio<br>Leverage ratio<br>Capital Utilisation<br>MREL<br>TLAC |
| Concentration | Concentration event Risk (LGD)<br>Event Risk |
| | |
| **Instruments** | **Underlying risk metrics** |
| Credit Risk | EAD<br>RWA<br>ECL<br>INCAP |
| Market Risk (Trading Book) | Value-at-Risk<br>Stressed VaR<br>Incremental Risk Charge<br>Regulatory/ Economic Market Risk capital |
| Market Risk (Banking Book) | IFRS P&L-at-Risk<br>NPV-at-Risk<br>Customer Behavior/Market Risk Economic capital<br>Revaluation-Reserve-at-Risk |
| Non-Financial Risk | Expected Loss<br>Regulatory/ Economic Operational Risk capital<br>Overdue iRisk |
| Business Risk | IFRS P&L-at-Risk |

### Step 4. Monitor and manage underlying risk limits

In order to verify that it remains within the risk appetite framework, ING reports its risk positions vis-à-vis its limits on a regular basis to senior management committees. The Quarterly Risk Update reflecting the exposure of ING against the risk appetite targets is submitted quarterly to the EB and the MBB and to the (Risk Committee of the) SB. Moreover, every quarter the financial plan is checked for potential limit breaches within a 1 year horizon, where in the strategic dialog the MBB can take mitigating measures or adjustments to the dynamic plan can be made.

## Stress testing

Stress testing is an important risk management tool that provides input for strategic decisions and capital planning. The purpose of stress testing is to assess the impact of plausible but severe stress scenarios on ING's capital and liquidity position. Stress tests provide insights into the vulnerabilities of certain portfolios, with regards to adverse macroeconomic circumstances, stressed financial markets, and changes in the (geo)political climate.

### Types of stress tests

Within ING, different types of stress tests are performed. The most comprehensive type of stress tests are the firm-wide scenario analyses, which involve setting scenario assumptions for all the relevant macroeconomic and financial market variables in all countries relevant to ING. These assumptions usually follow a qualitative narrative that provides a background to the scenario. In addition to firm-wide scenario analyses, ING executes scenario analyses for specific countries or portfolios. Furthermore, sensitivity analyses are performed, which focus on stressing one or more risk drivers; usually without an underlying scenario narrative. Finally, ING performs reverse stress tests, which aim to determine scenarios that could lead to a pre-defined severe adverse outcome.

### Process

The stress testing process of ING consists of several stages, which are:

- Risk identification & risk assessment: It identifies & assesses the risks ING or the relevant entity is facing when executing its strategy based on the current and possible future economic, political, regulatory and technological environment. It provides a description of the main risks related to the nature of ING's business, activities and vulnerabilities.
- Scenario definition & parameterisation: Based on the outcome of the previous step, a set of scenarios should be determined where the relevant scope and set of risk drivers is determined for each scenario, as well as the severity, the key assumptions and input parameters. The output of this phase includes a quantitative description of the stress scenarios to be analysed, the relevant output metrics and, when applicable, a narrative description.
- Impact calculation and aggregation: Based on the quantitative description of the stress scenarios determined in the previous step, the impact is determined for the relevant scenario, scope and horizon. The impact calculation and aggregation can be part of a recurring process or are part of a specific process set-up for one-off stress tests.
- Scenario reporting: For each stress test, a report is prepared after each calculation which describes the results of the scenario, gives a recap of the scenario and its main assumptions and parameters. It is complemented, if needed, with an advice for management action based on the stress testing results.
- Scenario control & management assessment: Depending on the outcomes of the stress test and the likelihood of the scenario, mitigating actions may be proposed. Mitigating actions may include, but are not limited to, sales or transfers of assets and reductions of risk limits.

### Methodology

Detailed and comprehensive models are used to calculate the impact of the scenarios. In these models, statistical analysis is combined with expert opinion to make sure that the results adequately reflect the scenario assumptions. The methodologies are granular and portfolio-specific and use different macroeconomic and market variables as input variables. The calculations are in line with our accounting and regulatory reporting frameworks. The stress testing models are subject to review by Model Risk Management.

## Regulatory environment

### CRRII/CRDV and BRRDII

On 16 April 2019, the European Parliament (EP) approved the final agreement on a package of reforms proposed by EC to strengthen the resilience and resolvability of European banks. The package of reforms comprises two regulations and two directives, namely amendments to the Capital Requirements Regulation and Directive (CRR/CRD), the Bank Recovery and Resolution Directive (BRRD), and the Single Resolution Mechanism Regulation (SRMR).

The key changes introduced by the banking reform package consist of among others a binding Leverage Ratio (LR) requirement, independent from the riskiness of the underlying exposures, as a backstop to risk-weighted capital requirements, and a Net Stable Funding Ratio (NSFR) based on the Basel NSFR standard but including adjustments with regard to pass-through models and covered bonds issuance. Further, the EBA obtained a mandate to investigate how to incorporate environmental, social, and governance (ESG) risks into the supervisory process and what the prudential treatment of assets associated with environmental or social objectives should look like. Also, the rules on the subordination of Minimum Requirement for own funds and Eligible Liabilities (MREL) instruments are tightened and a new category of large banks with a balance sheet size greater than EUR 100 billion, is introduced.

### Basel III revisions and upcoming regulations

In December 2017, the Basel III revisions were formally announced by the Basel Committee on Banking Supervision (BCBS). These new prudential rules for banks consist of a revision to the standardised approach to credit risk, the introduction of a capital floor based on standardised approaches, the use of internal models, the limitation of options for modelling operating risks, and new rules for the establishment of risk-weighted items and unused credit lines at the banks. In Europe, this will be implemented through the CRR III / CRD VI in the coming years. With this long implementation phase and the transposition into EU regulation still pending, some question marks remain on how this will shape up.

### Targeted Review of Internal Models

In order to make capital levels more comparable and to reduce variability in banks' internal models, the European Central Bank (ECB) introduced the Targeted Review of Internal Models (TRIM) in June 2017 to assess the reliability and comparability between banks' models. The TRIM aims to create a level playing field by harmonising the regulatory guidance around internal models with the ultimate goal to restore trust in European banks' use of internal models.

In July 2019, the ECB published final chapters of the guide to internal models, covering credit risk, market risk and counterparty credit risk. These risk type-specific chapters are intended to ensure a common and consistent approach to the most relevant aspects of the regulations on internal models for banks directly supervised by the ECB. Additionally, they provide transparency on how the ECB understands the regulations on the use of internal models to calculate own funds requirements for the three risk types. Impact on ING is through more stringent regulation on internal models as well as an increase of Risk Weigthed Assets (RWA).

## Top and emerging risks

The risks listed below are defined as material existing and emerging risks that may have a potentially significant impact on our financial position or our business model. They may have a material impact on the reputation of the company, introduce volatility in future operation results, or impact ING's medium and long-term strategy including the ability to pay dividends, maintain appropriate levels of capital or meet liquidity and funding targets. An emerging risk is defined as a risk that has the potential to have a significant negative effect on our performance, but whose impact on the organisation is currently more difficult to assess than other risk factors that are not identified as emerging risks.

The topics have emerged as part of the annual Risk Assessment that is performed as part of the Stress Testing Framework and the Risk Appetite Framework. The sequence in which the risks are presented below is not indicative of their likelihood of occurrence or the potential magnitude of their financial consequences.

During 2019, several changes were made to our top and emerging risks. The top risks in 2019 are related to financial crime, cybercrime and persistent low interest rates in Eurozone. Also, climate change risk remains an emerging risk, reflecting the impact a deterioration of the climate may have for the financial position and/or reputation of ING.

### Macroeconomic developments

The economic activity was marked in 2019 by a slowdown in global growth led by prolonged uncertainty on Brexit, effects of US-China trade tensions and reduced US fiscal stimulus. The decision of the United Kingdom to leave the European Union ('Brexit') remains a major political and economic event that continues to affect sentiment. Despite negotiating a revised deal in October 2019, the vote in the UK parliament did not go ahead. The UK parliament chose to postpone the vote on the deal until legislation needed to turn the withdrawal agreement into UK law was completed. ING continued to take steps throughout the year to prepare for various options. Although ING has activities in the UK through the Wholesale Banking (WB) business line, no material asset quality deterioration following the Brexit decision has taken place.

The coronavirus, COVID-19, is recently dominating global news. As the coronavirus outbreak spreads rapidly, a central ING team has been set up to monitor the situation globally and provide guidance on health and safety measures, travel advice and business continuity for our company. As the situation differs from country to country, we are following local government guidelines in our response to the virus. Also the potential economic implications for the countries and sectors where ING is active in are being assessed and discussed in order to identify possible mitigating actions.

### Financial economic crime
Knowing who we do business with helps us to protect our customers, society and our bank from financial economic crimes (FEC). We believe that as gatekeepers to the financial system we have an obligation to prevent criminals from misusing it or detect and respond when it is being misused. We believe we can be even more effective in safeguarding the financial system if we join forces and work with other banks and with national, European and global authorities and law enforcement agencies to tackle financial economic crime.

In 2019, we continued to implement and execute policies and procedures to further enhance our Know Your Customer (KYC) activities. We continued to work on the global KYC enhancement programme that started at ING in 2017 and which we built on in 2018 and 2019. The programme encompasses all customer segments in all ING business units. For more information on FEC and KYC see 'Compliance risk' chapter.

### Model risk
Risk management also depends on models more and more as banking has become a digital business in a volatile, uncertain, complex and ambiguous world with constantly changing customer needs, more demanding regulatory expectations, increasing dependency on the use of models and the need to adapt and react quickly.

In 2019, we initiated a programme (the Model Paradigm Shift) to improve the availability and quality of our data, model governance and processes, further strengthening our risk modelling and data capabilities to give ING a competitive advantage.

### Cybercrime
Cybercrime remains a continuous threat to companies in general and to financial institutions specifically. Both the frequency and the intensity of attacks increase on a global scale. Threats from Distributed Denial of Service (DDoS), targeted attacks (also called Advanced Persistent Threats) and Ransomware have intensified worldwide.

ING builds on its cybercrime resilience through its dedicated Cybercrime Expertise and Response Team, further enhancing the control environment to protect, detect and respond to e-banking fraud, DDoS and targeted attacks. Controls and monitoring continue to be embedded in the organisation as part of the overall internal control framework and are continuously re-assessed against existing and new threats. The identification and monitoring of new threat actors and campaigns relevant to ING also informs this process as does the closer alignment between IT security and fraud teams. In addition, ING continues to strengthen its global cybercrime and fraud resilience through extensive collaboration with financial industry peers, law enforcement authorities, government (e.g. National Cybersecurity Center) and internet service providers (ISPs).

### Low interest rates in Eurozone
The persistence of a low interest rate environment in Europe, where central banks held their rates at very low and even negative levels in most countries, continued to negatively impact short-term as well as long-term market rates. This is posing a challenge for banks to maintain positive income in the form of net interest income from traditional savings activities.

### Sourcing risk and third-party resources
The amount of business processes that is sourced to third-parties increased significantly over the years. Most notable is our (internal) sourcing in Poland, the Philippines and Slovakia but also (external) third-party sourcing increased.

Through the renewed sourcing policy and related control standard, ING will actively monitor the controls around sourcing (internal & external). According to 2019 EBA guidelines, all external and internal contracts have to re-assessed and properly classified and registered before end of 2021. In 2020, NFR will focus on improving business units' risk data on Sourcing risk and related reporting.

### Climate change risk

The urgency around climate change is escalating and climate-related risk tops the World Economic Forum's global ranking in terms of likelihood and impact. The potential financial impacts of extreme weather events such as hurricanes, floods and heatwaves are elevating the risks associated with climate change. With more than 38 million customers in over 40 countries, our business activities can both significantly influence communities and the environment and be impacted by climate risks. As such, we take our responsibility to help mitigate this risk seriously.

Shifts in societal expectations on climate change and developments in climate science are driving new initiatives and policy updates within the bank to address this threat. For example, we've set ambitious targets to reduce financing for coal power generation to close to zero by 2025, and no longer provide financing to new clients whose business is over 50 percent reliant on coal-fired power. By the end of 2025, we will not finance any clients in the utilities sector who are more than five percent reliant on coal. In addition, we are steering our loan portfolio to meet the well-below two degrees goal of the Paris Climate Accord. In 2019, we published our first progress report on Terra, our pathway towards climate alignment in the sectors most responsible for climate change.

We expect climate change to remain firmly on ING's agenda, as well as the agendas of our customers and of regulatory and supervisory bodies around the world. We have committed to report in line with the recommendations of the Taskforce for Climate-related Financial Disclosures (TCFD) and we continue to work on the challenging exercise of translating potential climate risks and transition risks into financial risk for ING.

## Task Force on Climate-Related Financial Disclosures (TCFD)

ING endorses the Financial Stability Board's (FSB) Task Force on Climate-Related Financial Disclosures (TCFD) recommendations. This voluntary disclosure outlines the progress made to date. To further strengthen understanding and adoption of TCFD recommendations, ING has joined the UNEP FI TCFD Phase 2 to develop transition and physical risk assessment models in 2019.

### Governance

ING's Climate Change Committee (CCC) is mandated to oversee and set priorities for the implementation of the TCFD recommendations and other strategic climate-related topics that impact the group. For details please refer to our approach to climate governance.

### Strategy

In order to get an understanding of our company's exposure to climate risk, we have started with the analysis of climate-affected sectors as outlined in the report 'Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017)'. We conducted an Energy Transition assessment for particularly sensitive sectors within the Transportation, Industrials, Power and Real Estate sectors where the results can help improve our understanding of the impacts of changing regulation and technology developments. ING is committed to continuously reviewing and monitoring its policies and strategies as climate-related risks and opportunities emerge. As a result of transition risk ING further refined its coal policy in 2017, targeting near-zero coal exposure by 2025.

In 2018, ING started measuring and steering our lending portfolio towards the Paris Agreement's well-below two degree goal by 2040 – our Terra approach (Report of the Executive Board). For instance, our automotive, real estate and power portfolio have been assessed. For an overview of how we capitalise on climate-related opportunities, please refer to Responsible finance (Report of the Executive Board).

### Risk Management

Our approach continues to evolve as we develop a better understanding of climate risk and we start to embed climate risk within our risk management process. ING has a Risk Identification and Risk Assessment process in place, helping us to adjust risk appetite and policies to reflect external environment management.

ING's Environmental and Social Risk (ESR) management process evaluates risks on a client and transaction basis. In 2019, we updated our ESR policy and implemented a standalone climate change policy which aims to limit deal-specific potential negative climate impacts. (refer to ESR policy).

## Metrics and Targets

We have set climate-related targets in our lending portfolio. This includes exiting coal by 2025 and steering our €600 billion portfolio towards meeting the Paris Agreement's well-below two degree goal (Terra Approach). Under Terra, we need to set one target per sector for each of the nine sectors. As of year-end 2019, we had developed an approach and target for five sectors. For details refer to our 2019 Terra Progress Report. For our approach to setting opportunity-related metrics and targets please refer to Climate Finance.

## Next Steps

In the course of 2020 we aim to identify physical risk in our lending portfolio while we continue our transition risk analysis. We utilise learnings and best practices from sector initiatives and our participation in the UNEP FI TCFD programme.

# Credit risk

## Introduction

Credit risk is the risk of loss from the default and/or credit rating deterioration of clients. Credit risks arise in ING's lending, financial markets and investment activities. The credit risk section provides information on how ING measures, monitors and manages credit risk and gives an insight into the portfolio from a credit risk perspective.

## Governance

ING's credit risk strategy is to maintain an internationally diversified loan and bond portfolio, avoiding large risk concentrations. The emphasis is on managing business developments within the business lines by means of a top-down risk appetite framework, which sets concentration limits for countries, individual clients, sectors, products, secondary risk (collateral/guarantees) and investment activities. The aim is to support relationship-banking activities, while maintaining internal risk/reward guidelines and controls.

Credit risk is a Tier 1 level risk function within ING and is part of the second line of defence. It is managed by regional and/or business unit CROs. The CRO Wholesale Banking (WB), CRO Challengers & Growth Markets (C&G), CRO Netherlands and CRO Belux focus on specific risks in the geographical and/or business areas of their responsibilities. The Financial Risk department is a Tier 2 level risk function, which is responsible for the consolidated risk appetite setting, risk frameworks, model development and policies.

The credit risk function encompasses the following activities:

- Measuring, monitoring and managing credit risks in the bank's portfolio;
- Challenging and approving new and modified transactions and borrower reviews;
- Managing the levels of provisioning and risk costs, and advising on impairments; and
- Providing consistent credit risk policies, systems and tools to manage the credit lifecycle of all activities.

## Credit risk categories

Credit risk uses the following risk categories to differentiate between the different types of credit risk:

- **Lending risk**: is the risk that the client (counterparty, corporate or individual) does not pay the principal, interest or fees on a loan when they are due, or on demand for letters of credit (LCs) and guarantees provided by ING.
- **Investment risk**: is the credit default and risk rating migration risk that is associated with ING's investments in bonds, commercial paper, equities, securitisations, and other similar publicly traded securities. This can be viewed as the potential loss that ING may incur as a result of holding a position in underlying securities whose Issuer's credit quality deteriorates or defaults. All investments in the banking book are classified in the investment risk category. The primary purpose of ING's investments in the banking books is for liquidity management.
- **Money market (MM) risk**: arises when ING places short-term deposits with a counterparty in order to manage excess liquidity. In the event of a counterparty default, ING may lose the deposit placed.
- **Pre-settlement (PS) risk**: arises when a client defaults on a transaction before settlement and ING must replace the contract by a trade with another counterparty at the then prevailing (possibly unfavourable) market price. This credit risk category is associated with derivatives transactions (exchange-traded derivatives, over-the-counter (OTC) derivatives and securities financing transactions).
- **Settlement risk**: is the risk that arises when there is an exchange of value (funds or instruments) for the same value date or different value dates and receipt is not verified or expected until after ING has given irrevocable instructions to pay or has paid or delivered its side of the trade. The risk is that ING delivers but does not receive delivery from its counterparty. ING manages settlement risk in the same way as other credit risks by setting a risk limit per client. Due to the short-term nature (typically one day), ING does not hold provisions or capital for settlement risk. Although a

relatively low risk, ING increasingly uses DVP (delivery versus payment) and safe settlement payment techniques to reduce settlement risk.

For the reconciliation between credit risk outstandings categories and financial assets, refer to table below:

**Reconciliation between credit risk categories and financial position**

| Credit risk categories | Mainly relates to: | Notes in the Consolidated financial statements |
|---|---|---|
| Lending risk | -Cash and balances with central banks<br>-Loans and advances to banks<br>-Loans and advances to customers<br>-Off-balance sheet items e.g. obligations under financial guarantees and letters of credit and undrawn credit facilities | Note 2 Cash and balances with central banks<br>Note 3 Loans and advances to banks<br>Note 4 Financial assets at fair value through profit or loss<br>Note 5 Financial assets at fair value through other comprehensive income<br>Note 7 Loans and advances to customers<br>Note 45 Contingent liabilities and commitments |
| Investment risk | -Debt securities<br>-Equity securities | Note 4 Financial assets at fair value through profit or loss<br>Note 5 Financial assets at fair value through other comprehensive income<br>Note 6 Securities at amortised cost |
| Money market (MM) risk | -Cash and balances with central banks<br>-Loans and advances to banks<br>-Loans and advances to customers | Note 2 Cash and balances with central banks<br>Note 3 Loans and advances to banks<br>Note 7 Loans and advances to customers |
| Pre-settlement (PS) risk | -Financial assets at fair value through profit or loss (trading assets and non-trading derivatives)<br>-Financial liabilities at fair value through profit or loss (trading assets and non-trading derivatives)<br>-Securities financing | Note 4 Financial assets at fair value through profit or loss<br>Note 15 Financial liabilities at fair value through profit or loss<br>Note 44 Offsetting financial assets and liabilities |
| Settlement risk | -Financial assets at fair value through profit or loss (trading assets and non-trading derivatives)<br>-Financial liabilities at fair value through profit or loss (trading assets and non-trading derivatives)<br>-Amounts to be settled | Note 4 Financial assets at fair value through profit or loss<br>Note 11 Other assets<br>Note 15 Financial liabilities at fair value through profit or loss<br>Note 17 Other liabilities |

## Credit risk appetite and concentration risk framework

The credit risk appetite and concentration risk framework is designed to prevent undesired high levels of credit risk and credit concentrations within various levels of the ING portfolio. It is derived from the concepts of boundaries and instruments as described in the Risk Appetite Framework.

### Credit risk appetite statements

Credit risk appetite is the maximum level of credit risk ING is willing to accept for growth and value creation. The credit risk appetite is linked to the overall bank-wide risk appetite framework. The credit risk appetite is expressed in quantitative and qualitative measures. Having a credit risk appetite achieves:

- Clarity about the credit risks that ING is prepared to assume, target setting and prudent risk management;
- Consistent communication to different stakeholders;
- Guidelines on how to align reporting and monitoring tools with the organisational structure and strategy; and
- Alignment of business strategies and key performance indicators of business units with ING's credit risk appetite through dynamic planning.

Credit risk appetite is present across different levels within ING, at portfolio level as well as transaction level. The various credit risk appetite components at portfolio and transaction levels together result in the credit risk appetite framework.

The credit risk appetite and concentration risk framework is composed of:

- **Country risk concentration**: Country risk is the risk that arises due to events in a specific country (or group of countries). In order to manage the maximum country event loss ING is willing to accept, boundaries are approved by the Supervisory Board ensure ING's consolidated 3-year average result before tax can absorb an estimated country event loss due to a country risk occurrence. The estimated level is correlated to the risk rating assigned to a given country.

  Actual country limits are set by means of country instruments, which are reviewed monthly and updated when needed. For countries with elevated levels of geopolitical or severe economic cycle risk, monitoring is performed on a more frequent basis with strict pipeline and exposure management.
- **Single name and industry sector concentration**: ING has established a credit concentration risk framework in order to identify, measure and monitor single name concentration and industry sector concentration (systemic risk). The same concept of boundaries and instruments are applied.
- **Product and secondary risk concentration**: ING has established a concentration framework to identify, measure and monitor product concentration and secondary risk.
- **Scenarios and stress tests**: Stress testing evaluates ING's financial stability under severe, but plausible stress scenarios, and supports decision-making that assures ING remains a financially going concern even after a severe event occurs. In addition to the bank-wide stress testing framework as described above, ING performs regularly sensitivity analysis to assess portfolio risks and concentrations. These sensitivity analyses are consistent with the stress scenario established in the Group-wide credit risk appetite framework.
- **Product approvals**: The product approval and review process (PARP) assesses and manages risks associated with the introduction of new or modified products. It ensures that sound due diligence is performed by relevant stakeholders and the relevant risks (credit, operational, compliance, etc.) are addressed appropriately.
- **Sector policies**: These are detailed analyses of defined products and/or industries. They identify the major risk drivers and mitigants, the internal business mandate, and propose the risk (including business) parameters – and potentially the maximum product and/or portfolio limit - to undertake that business. A sector policy is always prepared by the front office responsible for the internal business mandate and requires an approval from the designated approval authority. Sector policies may carry various names and/or may have geographical and/or business limitations (e.g. local vs global).
- **Reference benchmarks**: The maximum credit risk appetite per obligor group is expressed as a (benchmark) exposure at the concentration risk level, which corresponds to (maximum) internal

capital consumption for credit risk. It is used as a reference amount in the credit approval process.

- **Credit approval process**: The purpose of the credit approval process is that individual transactions and the risk associated with these transactions are assessed on a name-by-name basis. For each type of client there is a dedicated process with credit risk managers specialised along the business lines of ING. The credit approval process is supported by a risk rating system and exposure monitoring system. Risk ratings are used to indicate a client's creditworthiness which translates into a probability of default. This is used as input to determine the maximum risk appetite that ING has for a given type of client (reference benchmark). The determination of the delegated authority (the amount that can be approved at various levels of the organisation) is a function of the risk rating of the client and ING's credit risk exposure on the client.

Given the nature of the retail business, roles and responsibilities of the local credit risk policy are delegated to local retail credit risk management. However, the global retail risk policy prescribes no-go criteria and minimum standards for underwriting. Lending standards, including material changes to those standards, are approved by the global head of retail risk.

## Environmental and Social Risk Framework

ING's environmental and social risk (ESR) policy framework helps us make transparent choices about how, where and who we do business with. In 2019 we renewed our ESR Framework based on input from different stakeholders including clients, peers, NGOs and our own colleagues. Through regular updates like these we keep abreast of societal norms and regulation relating to sustainability and challenge our own increasingly strong commitments on the topics of human rights and climate change.

### ESR in practice in 2019

The ESR policy framework includes standards and best practice guidance for ESR-sensitive sectors. It includes explicit restrictions on activities not in line with ING's values and harmful to people or the environment (for example companies involved in manufacturing cluster munitions), which we will not directly finance.

The next table gives insight into the ESR policies that are part of the Framework and where they are applied.

**Credit risk portfolio per economic sector and application of ESR framework**

| in percentage | 2019 outstandings | ING Values | Human rights | Environmental compliance | Animal welfare | Defence | Equator principles | Forestry and Agrocommodities | Mining and Metals | Tobacco* | Infrastructure | Generic engineering* | Manufacturing | Chemicals | Energy** | Fisheries* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Consumer lending** | 32.4% | • | | | | | | | | | | | | | | |
| **Financial institutions** | 20.5% | • | | | | | | | | | | | | | | |
| **Governments** | 7.1% | • | | | | | | | | | | | | | | |
| **Other** | 0.4% | • | | | | | | | | | | | | | | |
| **Corporates** | 39.6% | • | • | • | | | | | | | | | | | | |
| Real estate | 6.6% | • | • | • | | | • | | | | | | | | | |
| Natural resources | 5.5% | • | • | • | | | • | | • | | | | | | • | |
| Transportation & logistics | 4.4% | • | • | • | | • | • | | | | | | • | | | |
| Services | 3.7% | • | • | • | | • | • | | | | • | | • | | | |
| Food, beverages & personal care | 3.2% | • | • | • | • | | • | • | | • | | • | | | | • |
| General industries | 3.2% | • | • | • | | • | • | • | | | | | • | | | |
| Builders & contractors | 2.0% | • | • | • | | | • | | | | | | • | | | |
| Chemicals, health & pharmaceuticals | 2.0% | • | • | • | • | | • | | | | | • | | • | | |
| Other | 1.9% | • | • | • | | | • | | | | | | | | | |
| Utilities | 1.5% | • | • | • | | | • | | | | | | | | • | |
| Media and telecom | 1.4% | • | • | • | | • | • | | | | • | | | | | |
| Retail | 1.1% | • | • | • | | | • | | | | | | | | | |
| Automotive | 0.8% | • | • | • | | • | • | | | | | | • | | | |
| Technology | 2.2% | • | • | • | | • | • | | | | | | • | • | | |

* Fully or partially excluded activities.
** Includes policies on Oil and Gas, Coal, Nuclear Energy and Power Generation.

The way the Framework is applied in practice differs per product type. Generally the largest potential environmental and social impacts come from large corporates within our Wholesale Banking (WB) segment. WB is therefore the initial focus of our assessments and where we promote active ESR dialogue. We have been working with wholesale clients for more than 15 years to support them in understanding and managing their environmental and social impact. A simplified version of the ESR policy framework, following the same rationale and principles, applies to ING's retail activities for mid-corporates and small medium enterprises.

The ESR policy framework is incorporated in ING's KYC policy framework, meaning the ESR client assessment is part of client on-boarding and review. The ESR framework minimum requirements are also included in ING's procurement policy and apply to the screening of suppliers of ING's procurement activities.

ESR is applied in practice in different ways, including an ESR client assessment during KYC onboarding, an ESR transaction assessment for Wholesale Banking, separate in-depth advice from the global ESR team for ESR high-risk WB transactions and name screening for transactions with fully restricted clients. These ESR check and controls are integrated into our client and transaction due diligence processes.

Of all WB engagements in scope of the ESR policy framework in 2019, 85 percent were considered ESR low risk, 9 percent ESR medium risk and 6 percent ESR high risk. ESR high-risk cases require specialised advice from the global ESR team. The team now consists of 13 dedicated ESR advisors, 11 of them are in Amsterdam and two are located in Geneva and New York. Whereas we have a strong ESR policy framework, we acknowledge that we need to further improve our processes in order to ensure accuracy and completeness of the data. The ESR advice assesses the specific product offered and impacts associated with it, the sector, operating context and geography of the engagement and other relevant factors. Based on this in-depth research, a binding advice is given that can only be overruled at Board level. Of the 304 ESR advices given in 2019, 45 percent were positive, 25 percent positive subject to conditions and 30 percent negative. Conditions can play an important role in helping clients transition towards improved environmental and social performance on the ground.

The ESR team's main focus is on its policy development and transaction advisory roles. However the team also provides training (both in-person and via webinars) to hundreds of colleagues around the world every year in risk, front-office, KYC and compliance teams, so that ESR knowledge is built on and spread.

### Updates in the ESR Framework

The renewed ESR Framework went live in July 2019. In this review, building on internal and external stakeholder input, we improved our structure and aimed to provide more clarity on the scope and governance of ESR. The Framework now includes standalone policies on human rights and climate change and an infrastructure policy. This reflects external developments, societal expectations and our ambitions for these topics and sustainability in general.

New restrictions in the updated framework include arctic offshore oil and gas exploration and production, white phosphorus, asbestos and small arms and light weapons for private individuals. We have a zero-tolerance policy for some of the restrictions, such as with companies involved in the production of cluster munitions. For others, we try to refrain as much as possible from any form of involvement, whether directly or indirectly. The new framework also affects companies with both controversial and non-controversial activities.

In the updated ESR policy framework we have ensured that each sector policy includes the proper references to the relevant standards of the human rights and climate change overarching pillars. Incorporating these helps us to determine which transactions require further analysis and action, and provides our stakeholders with a better understanding of our approach to human rights and climate change when assessing transactions. The updated ESR policy also encourages clients to identify and be transparent about how human rights and/or environmental issues affect their supply chains. They should provide evidence of proper monitoring and where relevant, translate these findings into acceptance criteria for partners and suppliers.

### Developing international best practice and stakeholder engagement

Our ESR approach helps us and our clients to gradually enhance the implementation of key standards like the UN Guiding Principles on Human Rights and the Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises. But beyond stimulating better environmental and social performance in our own portfolio, ING actively collaborates with other institutions, peers and regulators to address the environmental and social challenges we face:

- **ING and the Equator Principles (EPs):** The EPs, an environmental and social risk management framework adopted by over 100 banks globally, were updated in 2019. The new version (EP4), has increased the scope to capture more project-related transactions. It contains new commitments on human rights, climate change, Indigenous people and biodiversity. ING, an active EP Association member, co-led the coordination of the EP4 update process. ING is a member of several working groups, including those on social risks, climate change and scope. ING also co-leads the capacity building and training working group, which resulted in the roll-out of an online EP learning tool to ING risk and front-office employees last year. The tool is used by other EP banks globally.
- **Dutch Banking Sector Agreement**: We continued our engagement in Dutch multi-stakeholder platforms to implement the Dutch Banking Sector Agreement on International Responsible Business Conduct Regarding Human Rights. In 2018, we published our first human rights report in which we disclosed our saliency process and the human rights salient to ING – child labour, forced labour and land-related community issues. In 2019, we published an update focused on our role as a corporate lender and the outcome of an exercise where we proactively engaged with 29 clients in human rights.
- **Thun Group**: In the international arena, ING actively participates in the Thun Group, an informal group of bank representatives sharing expertise and experience to support the integration of the UN Guiding Principles on Business and Human Rights into the policies and practices of banks.
- **OECD**: ING's active role in promoting and integrating human rights is reflected in our participation as a formal advisory member to the OECD on responsible business conduct in our sector. In 2019 the OECD published the Due Diligence for Responsible Corporate Lending and Securities

Underwriting report, that provides a global environmental and social risk framework for financial institutions. We participate in the annual meetings for practitioners from financial institutions (export credit agencies, EP financial institutions, commercial banks, development institutions, etc.) organised by the OECD in Paris, enhancing knowledge sharing and collaboration.
- **United Nations Human Rights Office**: In May, at the request of the UN Human Rights Office of the High Commissioner, ING hosted a meeting with Dutch private sector industrials and the UN High Commissioner for Human Rights, Ms Michelle Bachelet, during her first official visit to the Netherlands, to discuss the role and leverage of the private sector in this important area.

By taking part in the above-mentioned initiatives, we aim to contribute our viewpoint and those of our clients, employees and other stakeholders to help shape a consensus and develop clear guidelines that can serve as a standard for our industry.

## Credit risk models

Within ING, internal Basel compliant models are used to determine probability of default (PD), exposure at default (EAD) and loss given default (LGD) for regulatory and economic capital purposes. These models also form the basis of ING's IFRS 9 loan loss provisioning (see 'IFRS 9 models' below). Bank-wide, ING has implemented around 100 credit risk models, for regulatory capital, economic capital and loan loss provisioning purposes.

There are two main types of PD, EAD and LGD models used throughout the Bank:
- **Statistical models** are created where a large set of default or detailed loss data is available. They are characterised by a sufficient number of data points that facilitate meaningful statistical estimation of the model parameters. The model parameters are estimated with statistical techniques based on the data set available;
- **Hybrid models** contain characteristics of statistical models combined with knowledge and experience of experts from risk management and front-office staff, literature from rating agencies, supervisors and academics. These models are especially appropriate for 'low default portfolios', where limited historical defaults exist.

### Credit risk rating process

In principle, all risk ratings are based on a Risk Rating (PD) Model that complies with the minimum requirements detailed in CRR/CRDIV, ECB Supervisory Rules and EBA guidelines. This concerns all borrower types and segments.

ING's PD rating models are based on a 1-22 scale (1=highest rating; 22=lowest rating) referred to as the 'Master scale', which roughly corresponds to the rating grades that are assigned by external rating agencies, such as Standard & Poor's, Moody's and Fitch. For example, an ING rating of 1 corresponds to an S&P/Fitch rating of AAA and a Moody's rating of Aaa; an ING rating of 2 corresponds to an S&P/Fitch rating of AA+ and a Moody's rating of Aa1, and so on.

The 22 grades are composed of the following categories:
- Investment grade (risk rating 1-10);
- Non-investment grade (risk rating 11-17);
- Sub-standard (risk rating 18-19); and
- Non-performing (risk rating 20-22).

The three first categories (1-19) are risk ratings for performing loans. The ratings are calculated in IT systems with internally developed models based on data that is either manually or automatically fed. Under certain conditions, the outcome of a manually fed model can be challenged through a rating appeal process. Risk ratings for non-performing loans (NPL) (20-22) are set by the global or regional credit restructuring department. For securitisation portfolios, the external ratings of the tranche in which ING has invested are leading.

Risk ratings assigned to clients are reviewed at least annually, with the performance of the underlying models monitored regularly. Over 90 percent of ING's credit exposures have been rated using one of the in-house developed PD rating models. Some of these models are global in nature, such as models for large corporates, commercial banks, insurance companies, central governments, local governments, funds, fund managers, project finance and leveraged companies. Other models are more regional- or country-specific: there are PD models for Small Medium

Enterprise (SME) companies in Central Europe, the Netherlands, Belgium, Luxembourg, as well as residential mortgage and consumer loan models in the various retail markets.

Rating models for retail clients are predominantly statistically driven and automated, such that ratings can be updated on a monthly basis. Rating models for large corporates, institutions and banks include both statistical characteristics and manual input, with the ratings being manually updated on at least an annual basis.

### Pre-settlement measurement models

For regulatory capital, pre-settlement (PS) exposure is calculated using a marked to market (MtM) plus regulatory-based add-on. For internal capital purposes, ING uses a combination of a MtM plus model add-on approach and a scenario simulation approach.

ING recognises that the above approaches are not sufficiently accurate for certain trading products such as highly structured or exotic derivative transactions. For the assessment of risk exposures of such complex products a bespoke calculation is made.

Under Pillar 1, ING uses the Current Exposure Method (Mark to Market method), which is a standard approach prescribed by the regulation. There are no exposures under the advanced, Internal Model Method (IMM) under Pillar1. Under Pillar 2 however, for FX and interest rate derivatives, ING uses a risk sensitive approach based on Monte Carlo simulations.

## Credit risk tools

### Credit risk systems and data standards

The acceptance, maintenance, measurement, management and reporting of credit risks at all levels of ING is executed through single, common credit risk data standards using shared credit risk tools that support standardised and transparent credit risk practices. ING has chosen to develop credit risk tools centrally. The philosophy is to use a single source of data, in an integrated approach that includes ING policy, the regulatory environment in which we operate, and the daily processes that are active throughout the Group. Disciplined application in these three areas is essential for achieving high data quality standards. The customer-centric data model conforms to the three core business needs of ING:

- To monitor the risks we undertake;
- To be compliant with our internal and external obligations; and
- To transact effectively and efficiently with our clients.

## Credit risk portfolio

ING's credit exposure is mainly related to lending to individuals and businesses followed by investments in bonds and securitised assets. Loans to individuals are mainly mortgage loans secured by residential property. Loans (including guarantees issued) to businesses are often collateralised, but may be unsecured based on the internal analysis of the borrower's creditworthiness. Bonds in the investment portfolio are generally unsecured, but predominantly consist of bonds issued by central governments and EU and/or OECD based financial institutions. Secured bonds, such as mortgage-backed securities and asset-backed securities are secured by the underlying diversified pool of assets (commercial or residential mortgages, car loans and/or other assets) held by the securities issuer. The last major credit risk source involves pre-settlement (PS) exposures which arise from trading activities, including derivatives, repurchase transactions and securities lending/borrowing transactions. This is also commonly referred to as counterparty credit risk.

The prior period outstandings have been updated to improve consistency and comparability to the current year presentation. This is applicable to all following tables in the sections credit risks portfolio, credit risk mitigation and credit quality that include outstandings with prior period comparatives.

## Portfolio analysis per business line

### Outstandings per line of business[1,2,3]

| | | Wholesale Banking | | Retail Benelux | | Retail Challengers & Growth Markets | | Corporate Line | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rating class** | | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Investment grade | 1 (AAA) | 31,859 | 25,179 | 372 | 466 | 18,973 | 16,390 | 24,774 | 29,333 | 75,978 | 71,368 |
| | 2-4 (AA) | 46,394 | 46,847 | 5,853 | 5,572 | 36,460 | 28,515 | 1,832 | 1,431 | 90,539 | 82,365 |
| | 5-7 (A) | 66,756 | 63,917 | 20,922 | 19,645 | 48,587 | 41,325 | 323 | 398 | 136,588 | 125,285 |
| | 8-10 (BBB) | 115,888 | 110,875 | 115,192 | 109,844 | 49,681 | 56,551 | 3,190 | 3,149 | 283,951 | 280,419 |
| Non-Investment grade | 11-13 (BB) | 86,342 | 93,152 | 63,993 | 66,899 | 41,584 | 43,154 | 31 | 957 | 191,950 | 204,162 |
| | 14-16 (B) | 22,929 | 18,462 | 15,845 | 16,447 | 14,755 | 12,098 | | 13 | 53,528 | 47,020 |
| | 17 (CCC) | 1,081 | 1,648 | 2,223 | 2,324 | 933 | 764 | 98 | 90 | 4,335 | 4,826 |
| Substandard grade | 18 (CC) | 1,228 | 1,441 | 1,409 | 1,492 | 531 | 602 | | . | 3,168 | 3,536 |
| | 19 (C) | 659 | 298 | 1,056 | 1,093 | 672 | 630 | | . | 2,387 | 2,022 |
| NPL grade | 20-22 (D) | 4,516 | 4,395 | 4,316 | 4,229 | 2,399 | 2,189 | 275 | 314 | 11,506 | 11,128 |
| **Total** | | **377,651** | **366,214** | **231,180** | **228,011** | **214,575** | **202,220** | **30,524** | **35,685** | **853,930** | **832,130** |
| | | | | | | | | | | | |
| **Industry** | | | | | | | | | | | |
| Private Individuals | | 31 | 32 | 164,466 | 164,220 | 167,262 | 156,385 | | | 331,758 | 320,637 |
| Central Banks | | 34,044 | 28,962 | | | 8,383 | 6,124 | 23,339 | 27,116 | 65,766 | 62,202 |
| Commercial Banks | | 44,152 | 45,213 | 250 | 251 | 8,884 | 8,889 | 3,502 | 4,461 | 56,788 | 58,814 |
| Natural Resources | | 54,113 | 52,458 | 976 | 1,153 | 806 | 910 | | | 55,894 | 54,521 |
| Central Governments | | 37,449 | 32,356 | 1,364 | 1,306 | 6,356 | 6,244 | 3,131 | 3,131 | 48,300 | 43,037 |
| Non-Bank Financial Institutions | | 45,214 | 37,032 | 1,832 | 2,138 | 378 | 623 | 512 | 926 | 47,936 | 40,720 |
| Real Estate | | 30,819 | 38,517 | 12,769 | 12,222 | 2,732 | 2,353 | | | 46,320 | 53,092 |
| Transportation & Logistics | | 27,334 | 27,009 | 2,882 | 2,704 | 764 | 769 | | | 30,980 | 30,481 |
| Food, Beverages & Personal Care | | 16,691 | 14,996 | 5,960 | 5,601 | 2,151 | 2,325 | | | 24,802 | 22,923 |
| Services | | 10,252 | 12,461 | 10,929 | 9,911 | 862 | 990 | 3 | 2 | 22,046 | 23,363 |
| General Industries | | 12,599 | 14,799 | 4,269 | 3,934 | 2,764 | 2,801 | | | 19,632 | 21,535 |
| Lower Public Administration | | 3,594 | 3,459 | 5,619 | 5,296 | 8,184 | 8,227 | | | 17,397 | 16,983 |
| Utilities | | 16,377 | 15,154 | 741 | 597 | 145 | 143 | | | 17,263 | 15,893 |
| Chemicals, Health & Pharmaceuticals | | 9,213 | 10,190 | 6,213 | 6,258 | 1,017 | 1,129 | | | 16,443 | 17,577 |
| Other | | 35,769 | 33,574 | 12,910 | 12,420 | 3,889 | 4,309 | 36 | 50 | 52,603 | 50,353 |
| **Total** | | **377,651** | **366,214** | **231,180** | **228,011** | **214,575** | **202,220** | **30,524** | **35,685** | **853,930** | **832,130** |

1,2,3 see next page

## Outstandings per line of business [1,2,3] - continued

| Region | | Wholesale Banking 2019 | Wholesale Banking 2018 | Retail Benelux 2019 | Retail Benelux 2018 | Retail Challengers & Growth Markets 2019 | Retail Challengers & Growth Markets 2018 | Corporate Line 2019 | Corporate Line 2018 | Total 2019 | Total 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Europe | Netherlands | 41,255 | 41,807 | 142,547 | 142,621 | 905 | 657 | 25,340 | 30,025 | 210,046 | 215,110 |
| | Belgium | 33,936 | 36,546 | 82,368 | 79,362 | 572 | 671 | 18 | 16 | 116,894 | 116,595 |
| | Germany | 18,067 | 15,832 | 485 | 476 | 99,966 | 96,278 | 43 | 45 | 118,561 | 112,630 |
| | Poland | 15,713 | 14,377 | 66 | 66 | 20,377 | 17,801 | | | 36,156 | 32,244 |
| | Spain | 8,849 | 10,957 | 68 | 64 | 21,838 | 19,092 | 30 | 15 | 30,785 | 30,128 |
| | United Kingdom | 27,026 | 26,633 | 277 | 256 | 225 | 258 | 1,872 | 1,463 | 29,400 | 28,610 |
| | Luxemburg | 22,209 | 18,145 | 4,051 | 3,779 | 1,554 | 1,603 | 13 | 13 | 27,827 | 23,540 |
| | France | 13,914 | 13,736 | 519 | 519 | 6,267 | 4,605 | 3 | 5 | 20,703 | 18,865 |
| | Rest of Europe | 65,432 | 65,324 | 406 | 400 | 22,816 | 23,962 | 25 | 21 | 88,679 | 89,706 |
| Americas | | 67,893 | 64,672 | 223 | 294 | 1,457 | 1,572 | 340 | 379 | 69,912 | 66,917 |
| Asia | | 52,065 | 48,563 | 103 | 105 | 180 | 194 | 2,840 | 3,703 | 55,188 | 52,564 |
| Australia | | 8,622 | 6,755 | 27 | 28 | 38,416 | 35,524 | 1 | 1 | 47,066 | 42,308 |
| Africa | | 2,671 | 2,867 | 40 | 43 | 2 | 4 | | | 2,713 | 2,915 |
| **Total** | | **377,651** | **366,214** | **231,180** | **228,011** | **214,575** | **202,220** | **30,524** | **35,685** | **853,930** | **832,130** |

1 Based on credit risk measurement contained in lending, pre-settlement, money market and investment activities.
2 Based on the total amount of credit risk in the respective column using ING's internal credit risk measurement methodologies. Economic sectors (industry) below 2% are not shown separately but grouped in Other.
3 Geographic areas are based on country of residence, except for private individuals for which the geographic areas are based on the primary country of risk.

### Overall Portfolio

During 2019, ING's portfolio size increased by EUR 22.3 billion (2.69%) to EUR 854 billion outstanding, driven by volume growth and foreign exchange rate changes. The net volume growth was concentrated in the Lending risk category. FX rate movements contributed to EUR 3.2 billion of the total growth, driven by the appreciation of the US dollar (+1.8%), British pound (+5.5%), Australian dollar (+1.5%) and Polish new zloty (+0.9%), partially off-set by the depreciation of New Turkish Lira (-9.0%) and New Romania Leu (-2.7%) against the Euro.

### Rating distribution

Overall the rating class concentration improved. The share of Investment grade rating classes increased from 67.2% to 68.7%, while the share of non-investment grade slightly decreased, from 30.8% to 29.3%. Substandard grade outstanding remained stable at EUR 5.5 billion whereas the NPL grade increased by 3.4%.

With respect to the rating distribution within the Business lines, in Wholesale Banking AAA-rated assets increased driven by the reserve deposit to Banque Centrale du Luxembourg and bond exposure to the Federal Government of the United States of America. Wholesale A rating class increased as a result of outstanding to Bank of Japan and large corporate customers in the US, Asia and the Netherlands. Reduced concentration in the BB rating class was mainly seen in real estate exposure.

In Retail Challengers & Growth Markets, the increase in AAA-rating was explained by increased reserve deposit to Deutsche Bundesbank. Volume growth in AA and A-rated residential mortgages was visible in Australia, Germany, Poland and Spain. This positive effect on the rating composition of C&G was slightly off-set by an increase in B rating related to lower ratings of Turkey's mid-corporate segment.

The rating distribution for Retail Benelux improved mostly driven by improved risk profile of Dutch residential mortgages shifting from rating classes BB to BBB, driven by historically low unemployment rate and continuing increase of the NVM House price index, improving LTV's.

Corporate line decreased concentration in AAA rating class due to a reduction in the reserve deposit with De Nederlandsche Bank.

### Industry

The industry composition within Retail is concentrated in private individuals with 71% for Retail Benelux and 78% for Retail Challengers & Growth. In C&G, mortgage volume increased, primarily in Germany, Poland and Australia.

In Retail Benelux the slight increase in Belgium and Luxemburg was largely off-set by the overall reduction in Dutch mortgages due to a trend of early pre-payments and the transfer from Westland Utrecht Bank to Nationale Nederlanden.

Within Wholesale Banking, the sector development in Central Governments and Central Banks is consistent with the aforementioned development in the AAA-rating category. Exposure towards Commercial Banks decreased mainly due to reduced pre-settlement and lending exposures within UK, Republic of Korea and Spain. Outstanding to Non-Bank FIs increased, most notably in funds & fund management sub-industry in Western Europe.

Apart from the movements against the financial counterparties, ING Wholesale increased its exposure to Food, Beverages & Personal Care industry (in Brazil and Hong Kong); to Natural Resources (UK and Singapore), and to Utilities (Luxemburg and the UK). Exposure decreased in Real Estate (Italy and the Benelux), Services (France and Belgium), and General Industries (US and the Netherlands).

### Portfolio analysis per geographical area

The portfolio analysis per geographical area re-emphasizes the international distribution of the ING portfolio. The share of Netherlands in the overall portfolio decreased further from 25.9% to 24.6%.

The most noticeable outstanding trends in the Netherlands were the previously mentioned reduction in regulatory reserves with the central bank. The lower volumes of residential mortgage loans were almost completely off-set by a growth in term loans granted to SMEs. For Belgium the overall exposure remained fairly stable as the reduction in the central bank deposit was off-set by increased exposures to Non-Bank FIs and growth in term loans to mid-corporates. Outstanding in Germany increased mainly due to residential mortgage lending, instalment loans and central bank exposures.

The higher exposure in the Americas was mainly driven by bond exposures to the US central government. In Asia, the concentration of outstanding slightly increased, with noticeable growth in exposure to Japan and Singapore, partly off-set by reduced exposures in China and Republic of Korea. Australia reported a growth in outstanding which was mainly driven by trade related transactions with Commercial Banks and mortgage lending to Private Individuals.

The top 5 countries within Rest of Europe based on outstanding were: Italy (EUR 16,781 million), Switzerland (EUR 12,016 million), Turkey (EUR 11,383 million), Romania (EUR 7,473 million) and Russian Federation (EUR 5,652 million).

## Outstandings by economic sectors and geographical area[1]

| | Region | | | | | | | | | | | | | Total | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industry** | Netherlands | Belgium | Germany | Poland | Spain | United Kingdom | Luxemburg | France | Rest of Europe | America | Asia | Australia | Africa | 2019 | 2018 |
| Private Individuals | 117,194 | 43,057 | 84,281 | 11,296 | 20,758 | 248 | 3,019 | 2,242 | 15,626 | 222 | 179 | 33,602 | 36 | 331,758 | 320,637 |
| Central Banks | 21,635 | 16,651 | 7,573 | 211 | 370 | 1,867 | 5,048 | 796 | 6,454 | 0 | 4,951 | 200 | 8 | 65,766 | 62,202 |
| Commercial Banks | 1,918 | 358 | 4,231 | 254 | 743 | 7,206 | 3,771 | 5,945 | 7,398 | 7,682 | 13,576 | 3,353 | 352 | 56,788 | 58,814 |
| Natural Resources | 2,556 | 1,323 | 959 | 729 | 220 | 4,307 | 2,339 | 652 | 16,037 | 9,521 | 15,442 | 749 | 1,061 | 55,894 | 54,521 |
| Central Governments | 7,970 | 5,777 | 3,033 | 6,626 | 4,597 | 42 | 184 | 1,554 | 6,668 | 9,724 | 1,071 | 689 | 367 | 48,300 | 43,037 |
| Non-Bank Financial Institutions | 4,168 | 2,516 | 3,824 | 1,292 | 906 | 7,486 | 4,438 | 1,815 | 4,974 | 12,435 | 3,259 | 674 | 149 | 47,936 | 40,720 |
| Real Estate | 17,162 | 8,949 | 450 | 2,375 | 659 | 326 | 2,410 | 3,006 | 3,682 | 3,395 | 805 | 3,091 | 8 | 46,320 | 53,092 |
| Transportation & Logistics | 4,722 | 2,298 | 505 | 1,100 | 569 | 2,081 | 868 | 812 | 6,129 | 3,979 | 6,818 | 651 | 447 | 30,980 | 30,481 |
| Food, Beverages & Personal Care | 6,301 | 3,095 | 322 | 2,093 | 329 | 995 | 1,779 | 874 | 2,602 | 4,632 | 1,651 | 111 | 19 | 24,802 | 22,923 |
| Services | 4,683 | 9,272 | 574 | 822 | 162 | 774 | 646 | 711 | 1,109 | 2,264 | 604 | 426 | 0 | 22,046 | 23,363 |
| General Industries | 4,096 | 3,301 | 1,143 | 2,295 | 274 | 382 | 437 | 144 | 3,504 | 2,628 | 1,423 | 5 | 0 | 19,632 | 21,535 |
| Utilities | 1,331 | 1,056 | 1,673 | 654 | 418 | 2,032 | 571 | 445 | 3,103 | 3,493 | 1,380 | 843 | 265 | 17,263 | 16,983 |
| Lower Public Administration | 522 | 5,949 | 5,798 | 727 | 4 | | 728 | 471 | 536 | 958 | 18 | 1,686 | 0 | 17,397 | 15,893 |
| Chemicals, Health & Pharmaceuticals | 4,160 | 3,517 | 935 | 1,066 | 112 | 95 | 257 | 524 | 2,812 | 2,286 | 474 | 205 | 0 | 16,443 | 17,577 |
| Other | 11,628 | 9,774 | 3,260 | 4,614 | 664 | 1,560 | 1,331 | 712 | 8,045 | 6,694 | 3,536 | 782 | 2 | 52,603 | 50,353 |
| **Total** | **210,046** | **116,894** | **118,561** | **36,156** | **30,785** | **29,400** | **27,827** | **20,703** | **88,679** | **69,912** | **55,188** | **47,066** | **2,713** | **853,930** | **832,130** |
| | | | | | | | | | | | | | | | |
| **Rating class** | | | | | | | | | | | | | | | |
| Investment grade | 144,134 | 73,010 | 95,685 | 22,921 | 23,598 | 24,429 | 21,444 | 15,418 | 50,878 | 42,689 | 41,134 | 31,542 | 175 | 587,056 | 559,437 |
| Non-Investment grade | 60,937 | 39,994 | 21,616 | 12,219 | 6,832 | 4,807 | 6,229 | 5,163 | 35,775 | 25,660 | 13,553 | 14,573 | 2,457 | 249,814 | 256,007 |
| Substandard grade | 1,993 | 1,023 | 555 | 212 | 85 | 17 | 75 | 25 | 484 | 464 | 347 | 265 | 9 | 5,555 | 5,558 |
| NPL grade | 2,983 | 2,867 | 705 | 806 | 270 | 148 | 79 | 96 | 1,541 | 1,100 | 154 | 686 | 71 | 11,506 | 11,128 |
| **Total** | **210,046** | **116,894** | **118,561** | **36,156** | **30,785** | **29,400** | **27,827** | **20,703** | **88,679** | **69,912** | **55,188** | **47,066** | **2,713** | **853,930** | **832,130** |

1 Geographic areas are based on country of residence, except for private individuals for which the geographic areas are based on the primary country of risk.

## Credit risk mitigation

ING uses various credit risk mitigation techniques and instruments to mitigate the credit risk associated with an exposure and to reduce the losses incurred subsequent to a default by a customer. The most common terminology used in ING for credit risk protection is 'cover'. While a cover may be an important mitigant of credit risk and an alternative source of repayment, generally it is ING's practice to lend on the basis of the customer's creditworthiness rather than exclusively relying on the value of the cover.

### Cover forms

Within ING, there are two distinct forms of covers. First, where the asset has been pledged to ING as collateral or security ING has the right to liquidate it should the customer is unable to fulfil its financial obligation. As such, the proceeds can be applied towards full or partial compensation of the customer's outstanding exposure. This may be tangible (such as cash, securities, receivables, inventory, plant and machinery, and mortgages on real estate properties) or intangible (such as patents, trademarks, contract rights and licenses). Second, where there is a third-party obligation, indemnification or undertaking (either by contract and/or by law) ING has the right to claim from that third party an amount, if the customer fails on its obligations. The most common examples are guarantees (such as parent guarantees and export credit insurances), letters of comfort or third-party pledged mortgages.

### Cover valuation methodology

General guidelines for cover valuation are established to ensure consistent application within ING. These also require that the value of the cover is monitored on a regular basis. Covers are revalued periodically and whenever there is reason to believe that the market is subject to significant changes in conditions. The frequency of monitoring and revaluation depends on the type of cover.

The valuation method also depends on the type of covers. For asset collateral, the valuation sources can be the customer's balance sheet (e.g. inventory, machinery and equipment), nominal value (e.g. cash and receivables), market value (e.g. securities and commodities), independent valuations (commercial real estate) and market indices (residential real estate). For third-party obligations, the valuation is based on the value that is attributed to the contract between ING and that third party.

### Cover values

This section provides insight into the types of covers and the extent to which exposures benefit from collateral or guarantees. The disclosure differentiates between risk categories (lending, investment, money market and pre-settlement). The most relevant types of cover include mortgages, financial collateral (cash and securities) and guarantees. ING obtains cover that is eligible for credit risk mitigation under CRR/CRDIV, as well as cover that is not eligible. Collateral covering financial market transactions is valued on a daily basis, and as such not included in the following tables. To mitigate the credit risk arising from Financial Markets transactions, the bank enters into legal agreements governing the exchange of financial collateral (high-quality government bonds and cash).

The cover values are presented for the total portfolio of ING, both the performing and non-performing portfolio. Our definition of non-performing is explained in detail in the Credit restructuring section (below). For additional insight, a breakdown of ING's portfolio by industry and geography is provided.

Exposures are categorised into different Value to Loan (VTL) buckets that give insight in the level of collateralisation of ING's portfolio. VTL is calculated as the cover value divided by the outstandings at the balance sheet date. The cover values are indexed where appropriate and exclude any cost of liquidation. Covers can either be valid for all or some of a borrower's exposures or particular outstandings, the latter being the most common. For the purpose of aggregation, over-collateralisation is ignored in the total overview and VTL coverage of more than 100% is reported as fully covered. For VTL coverage in the tables for Dutch mortgages, consumer lending and business lending, each cover is subsequently assigned to one of the six defined VTL buckets: no cover, >0% to 25%, >25% to 50%, >50% to 75%, >75% to <100%, and ≥ 100%.

The next table gives an overview of the collateralisation of the ING's total portfolio.

**Cover values including guarantees received – 2019**

| | | Cover type | | | | Value to Loan | | |
|---|---|---|---|---|---|---|---|---|
| | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | Partially covered | Fully covered |
| Consumer Lending | 329,949 | 574,786 | 3,775 | 26,766 | 36,774 | 6.9% | 7.6% | 85.5% |
| Business Lending | 378,444 | 154,351 | 21,073 | 93,407 | 296,286 | 36.7% | 24.3% | 39.1% |
| Investment and Money Market | 94,866 | 33 | 133 | 64 | 266 | 96.0% | 3.9% | 0.1% |
| ***Total Lending, Investment and Money Market*** | **803,258** | **729,171** | **24,981** | **120,236** | **333,326** | **31.4%** | **15.0%** | **53.5%** |
| Pre-settlement | 50,672 | | | | | | | |
| **Total Group** | **853,930** | | | | | | | |

**Cover values including guarantees received – 2018**

| | | Cover type | | | | Value to Loan | | |
|---|---|---|---|---|---|---|---|---|
| | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | Partially covered | Fully covered |
| Consumer Lending | 318,804 | 547,832 | 3,509 | 25,760 | 39,446 | 6.6% | 7.9% | 85.4% |
| Business Lending | 365,804 | 147,205 | 19,090 | 86,222 | 257,929 | 37.0% | 24.5% | 38.5% |
| Investment and Money Market | 95,857 | | 80 | 145 | 214 | 90.8% | 9.1% | 0.2% |
| ***Total Lending, Investment and Money Market*** | **780,465** | **695,037** | **22,679** | **112,128** | **297,590** | **31.2%** | **15.8%** | **52.9%** |
| Pre-settlement | 51,665 | | | | | | | |
| **Total Group** | **832,130** | | | | | | | |

Over the year, the collateralisation level of the total portfolio remained stable. Excluding the pre-settlement portfolio, 53.5% of ING Group's outstandings were fully collateralised in 2019 (2018: 52.9%). Since investments traditionally do not require covers, the percentage for 'no covers' in this portfolio is close to 90%. However, 99% of the investment outstanding is investment grade. Improved economic conditions in ING's main markets contributed to improved collateral valuations, observed in consumer lending.

### Consumer lending portfolio

The consumer lending portfolio accounts for 38.6% of ING's total outstanding, primarily consisting of residential mortgage loans and other consumer lending loans, which mainly comprise term loans, revolvers and personal loans to consumers. As a result, most of the collateral consists of mortgages. The mortgage values are collected in an internal central database and in most cases external data is used to index the market value (e.g. mortgage values for the Netherlands are updated on a quarterly basis using the NVM house price index).

A significant part of ING's residential mortgage portfolio is in the Netherlands (37.9%), followed by Germany (25.0%), Belgium and Luxembourg (13.6%) and Australia (10.7%). Given the size of the Dutch mortgage portfolio, the valuation methodology to determine the cover values for Dutch residential mortgages is provided below.

### Dutch mortgages valuation

When a mortgage loan is granted in the Netherlands, the policy dictates maximum loan to market value (LTMV) for an existing property and for construction property financing of 100 percent.

In case of newly built houses usually the building /purchase agreement is sufficient as valuation. In the case of existing houses three types of valuations are allowed. If the LTMV is below 90 percent, either WOZ (fiscal market value, determined by government authorities) or an automated model valuation (the Calcasa ING Valuation) are permitted. In most cases, a valuation is performed by certified valuers that are registered at one of the organisations accepted by ING. In addition, the valuer must be a member of the NVM (Nederlandse Vereniging van Makelaars – Dutch Association of Real Estate Agents), VBO (Vereniging Bemiddeling Onroerend Goed – Association of Real Estate Brokers), VastgoedPRO (Association of Real Estate Professionals) or NVR (Nederlandse Vereniging van Rentmeesters).

### Consumer lending portfolio – cover values

The below tables show the values of different covers and the VTL split between performing and non-performing loans.

## Cover values including guarantees received – Consumer lending portfolio - 2019

| | | Cover type | | | | Value to Loan | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | >0% - 25% | >25%-50% | >50% - 75% | >75% - <100% | ≥ 100% |
| **Performing** | | | | | | | | | | | |
| Residential Mortgages (Private Individuals) | 294,658 | 561,766 | 2,897 | 24,281 | 30,541 | | | 0.1% | 0.8% | 7.2% | 91.8% |
| Residential Mortgages (SME) [1] | 5,687 | 8,786 | 258 | 145 | 1,402 | | 0.2% | 0.8% | 1.4% | 8.0% | 89.6% |
| Other Consumer Lending | 26,025 | 183 | 603 | 2,204 | 3,980 | 83.8% | 0.3% | 0.1% | 0.1% | 0.3% | 15.4% |
| **Total Performing** | **326,370** | **570,734** | **3,759** | **26,630** | **35,922** | **6.7%** | **0.0%** | **0.1%** | **0.8%** | **6.7%** | **85.7%** |
| | | | | | | | | | | | |
| **Non-performing** | | | | | | | | | | | |
| Residential Mortgages (Private Individuals) | 2,477 | 3,804 | 14 | 121 | 720 | 0.2% | 0.2% | 0.7% | 2.3% | 9.6% | 87.1% |
| Residential Mortgages (SME) [1] | 147 | 240 | 0 | 7 | 36 | 0.2% | 0.3% | 0.8% | 2.9% | 6.0% | 89.8% |
| Other Consumer Lending | 956 | 7 | 2 | 8 | 96 | 94.0% | 0.4% | 0.2% | 0.4% | 0.5% | 4.6% |
| **Total Non-performing** | **3,579** | **4,052** | **16** | **136** | **852** | **25.3%** | **0.2%** | **0.5%** | **1.8%** | **7.0%** | **65.2%** |
| | | | | | | | | | | | |
| **Total Consumer Lending** | **329,949** | **574,786** | **3,775** | **26,766** | **36,774** | **6.9%** | **0.0%** | **0.1%** | **0.8%** | **6.7%** | **85.5%** |

1 Consists mainly of residential mortgages to small one man business clients.

**Cover values including guarantees received – Consumer lending portfolio - 2018**

| | | Cover type | | | | Value to Loan | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | >0% - 25% | >25%-50% | >50% - 75% | >75% - <100% | ≥ 100% |
| **Performing** | | | | | | | | | | | |
| Residential Mortgages (Private Individuals) | 285,976 | 535,664 | 2,839 | 23,741 | 33,446 | | | 0.1% | 1.0% | 7.3% | 91.6% |
| Residential Mortgages (SME) [1] | 5,383 | 8,219 | 160 | 155 | 1,239 | | 0.3% | 0.8% | 1.7% | 7.5% | 89.7% |
| Other Consumer Lending | 23,937 | 156 | 493 | 1,694 | 4,072 | 84.7% | 0.3% | 0.1% | 0.1% | 0.5% | 14.3% |
| **Total Performing** | **315,297** | **544,039** | **3,492** | **25,591** | **38,757** | **6.4%** | **0.1%** | **0.1%** | **0.9%** | **6.8%** | **85.7%** |
| | | | | | | | | | | | |
| **Non-performing** | | | | | | | | | | | |
| Residential Mortgages (Private Individuals) | 2,490 | 3,568 | 16 | 152 | 607 | 0.5% | 0.2% | 0.8% | 2.9% | 13.6% | 82.0% |
| Residential Mortgages (SME) [1] | 134 | 218 | | 9 | 29 | 0.4% | | 0.7% | 2.4% | 8.9% | 87.7% |
| Other Consumer Lending | 884 | 7 | 1 | 9 | 52 | 95.4% | 0.5% | 0.1% | 0.2% | 0.6% | 3.2% |
| **Total Non-performing** | **3,508** | **3,793** | **17** | **169** | **689** | **24.4%** | **0.2%** | **0.6%** | **2.2%** | **10.1%** | **62.4%** |
| | | | | | | | | | | | |
| **Total Consumer Lending** | **318,804** | **547,832** | **3,509** | **25,760** | **39,446** | **6.6%** | **0.1%** | **0.1%** | **1.0%** | **6.9%** | **85.4%** |

1 Consists mainly of residential mortgages to small one man business clients.

The collateralisation of the consumer lending portfolio continued to improve during 2019. The rise in collateralisation levels was due to rising housing prices observed in different mortgage markets, specifically noticeable the Netherlands.

ING's residential mortgage outstanding increased mainly in Germany (3.1%), Spain (14.8%) and Poland (23.2%). Mortgage outstanding in the Netherlands decreased slightly (0.8%). For the residential mortgages portfolio, the cover type guarantees relate to mortgages covered by governmental insurers under the Nationale Hypotheek Garantie (NHG) in the Netherlands. The NHG guarantees the repayment of a loan in case of a forced property sale.

## Business lending portfolio

Business lending accounts for 44.3 percent of ING's total outstanding (44.0 percent in 2018). In line with our objective to give stakeholders insight into the portfolio, we present the business lending portfolio per industry breakdown in accordance with the NAICS definition and per region and main market. Business Lending presented in this section does not include pre-settlement, investment and money market exposures, which are outlined in the next sections.

## Cover values including guarantees received - Business lending portfolio – 2019

| | | Cover type | | | | Value to Loan | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industry** | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | >0% - 25% | >25%-50% | >50% - 75% | >75% - <100% | ≥ 100% |
| Natural Resources | 53,796 | 1,197 | 2,426 | 22,041 | 35,691 | 26.6% | 15.3% | 9.6% | 11.6% | 12.9% | 24.1% |
| Real Estate | 45,927 | 85,946 | 1,442 | 5,942 | 17,765 | 2.6% | 0.7% | 1.9% | 2.0% | 9.7% | 83.1% |
| Central Banks | 42,087 | | 7 | | | 100.0% | | | | | |
| Non-Bank Financial Institutions | 30,230 | 13,726 | 11,486 | 6,565 | 43,672 | 26.2% | 2.8% | 4.6% | 5.0% | 5.9% | 55.6% |
| Transportation & Logistics | 29,303 | 3,293 | 168 | 7,519 | 36,223 | 17.0% | 6.4% | 2.3% | 4.1% | 11.3% | 58.9% |
| Food, Beverages & Personal Care | 22,585 | 8,030 | 407 | 8,777 | 34,633 | 24.5% | 5.2% | 7.8% | 10.3% | 12.8% | 39.5% |
| Commercial Banks | 22,508 | 331 | 129 | 1,656 | 6,062 | 72.4% | 3.3% | 2.0% | 1.6% | 5.9% | 14.8% |
| Services | 21,044 | 10,090 | 1,519 | 8,799 | 29,470 | 30.7% | 5.0% | 6.3% | 6.5% | 6.9% | 44.6% |
| General Industries | 18,849 | 5,031 | 246 | 5,369 | 22,154 | 32.2% | 5.1% | 4.3% | 8.3% | 9.6% | 40.6% |
| Utilities | 15,952 | 242 | 1,036 | 3,785 | 7,928 | 41.7% | 19.7% | 3.9% | 5.5% | 2.0% | 27.3% |
| Chemicals, Health & Pharmaceuticals | 15,410 | 8,361 | 203 | 3,744 | 12,439 | 26.4% | 6.7% | 3.9% | 7.5% | 11.8% | 43.7% |
| Builders & Contractors | 15,054 | 7,449 | 201 | 3,802 | 15,704 | 27.5% | 6.7% | 7.2% | 8.6% | 8.7% | 41.2% |
| Other [1] | 45,698 | 10,655 | 1,800 | 15,407 | 34,546 | 41.5% | 4.9% | 4.6% | 5.8% | 7.7% | 35.4% |
| | | | | | | | | | | | |
| **Total Business Lending** | **378,444** | **154,351** | **21,073** | **93,407** | **296,286** | **36.7%** | **6.0%** | **4.4%** | **5.7%** | **8.2%** | **39.1%** |
| ***of which Total Non-performing*** | ***7,856*** | ***2,600*** | ***281*** | ***2,643*** | ***6,305*** | ***32.6%*** | ***3.6%*** | ***7.9%*** | ***9.2%*** | ***16.5%*** | ***30.2%*** |

1 'Others' comprises industries with outstandings lower than EUR 10 billion.

## Cover values including guarantees received - Business lending portfolio – 2019

| | | | Cover type | | | | Value to Loan | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Region** | | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | >0% - 25% | >25%-50% | >50% - 75% | >75% - <100% | ≥ 100% |
| | Netherlands | 81,383 | 60,334 | 3,265 | 8,845 | 52,909 | 37.4% | 2.8% | 3.7% | 5.3% | 10.7% | 40.1% |
| | Belgium | 51,881 | 35,937 | 1,231 | 23,583 | 51,204 | 25.4% | 1.8% | 2.6% | 4.0% | 6.7% | 59.5% |
| | Germany | 18,366 | 3,143 | 95 | 1,237 | 4,916 | 62.7% | 9.2% | 2.4% | 2.2% | 2.5% | 20.9% |
| | Luxembourg | 19,013 | 7,076 | 1,690 | 3,780 | 31,685 | 48.3% | 2.3% | 6.6% | 3.2% | 3.0% | 36.7% |
| Europe | Poland | 17,498 | 8,896 | 135 | 3,053 | 27,356 | 30.1% | 3.4% | 4.6% | 7.0% | 11.4% | 43.4% |
| | United Kingdom | 14,919 | 1,132 | 1,128 | 4,381 | 10,159 | 39.0% | 18.0% | 5.7% | 8.9% | 5.3% | 23.0% |
| | Switzerland | 11,328 | 83 | 656 | 2,950 | 6,085 | 35.7% | 13.7% | 12.3% | 7.4% | 11.7% | 19.2% |
| | France | 10,015 | 6,843 | 147 | 2,003 | 4,661 | 39.5% | 5.7% | 5.5% | 3.5% | 1.3% | 44.6% |
| | Rest of Europe | 48,494 | 15,504 | 2,873 | 17,219 | 40,243 | 32.1% | 7.8% | 4.9% | 4.7% | 10.2% | 40.2% |
| America | | 48,048 | 7,253 | 7,856 | 8,827 | 39,792 | 39.7% | 6.1% | 5.0% | 6.6% | 9.2% | 33.4% |
| Asia | | 45,131 | 920 | 1,941 | 14,051 | 24,632 | 37.2% | 8.4% | 4.5% | 9.2% | 7.2% | 33.5% |
| Australia | | 9,731 | 7,219 | 4 | 1,640 | 1,867 | 37.3% | 9.6% | 1.5% | 3.0% | 5.5% | 43.1% |
| Africa | | 2,638 | 9 | 51 | 1,838 | 778 | 9.2% | 16.5% | 9.6% | 13.2% | 12.2% | 39.3% |
| | | | | | | | | | | | | |
| **Total Business Lending** | | **378,444** | **154,351** | **21,073** | **93,407** | **296,286** | **36.7%** | **6.0%** | **4.4%** | **5.7%** | **8.2%** | **39.1%** |
| ***of which Non-performing*** | | ***7,856*** | ***2,600*** | ***281*** | ***2,643*** | ***6,305*** | ***32.6%*** | ***3.6%*** | ***7.9%*** | ***9.2%*** | ***16.5%*** | ***30.2%*** |

## Cover values including guarantees received - Business lending portfolio – 2018

| | | Cover type | | | | Value to Loan | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industry** | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | >0% - 25% | >25%-50% | >50% - 75% | >75% - <100% | ≥ 100% |
| Natural Resources | 52,783 | 1,170 | 2,142 | 17,944 | 38,366 | 23.9% | 15.5% | 11.9% | 11.2% | 13.3% | 24.2% |
| Real Estate | 52,476 | 93,181 | 1,500 | 7,399 | 10,995 | 4.3% | 1.2% | 2.2% | 3.1% | 7.6% | 81.6% |
| Central Banks | 34,365 | | 6 | | | 100.0% | | | | | |
| Non-Bank Financial Institutions | 21,083 | 1,581 | 9,163 | 5,529 | 32,346 | 34.6% | 5.6% | 3.2% | 9.1% | 6.9% | 40.6% |
| Transportation & Logistics | 28,980 | 3,085 | 148 | 7,470 | 30,855 | 17.7% | 6.2% | 3.0% | 4.5% | 10.3% | 58.4% |
| Food, Beverages & Personal Care | 20,970 | 7,376 | 302 | 7,380 | 24,099 | 28.7% | 4.9% | 6.8% | 10.3% | 11.8% | 37.6% |
| Commercial Banks | 23,876 | 323 | 338 | 1,312 | 3,918 | 78.8% | 2.6% | 1.7% | 0.3% | 6.2% | 10.4% |
| Services | 22,248 | 9,379 | 2,889 | 7,480 | 21,432 | 34.1% | 4.7% | 4.2% | 6.7% | 6.0% | 44.3% |
| General Industries | 20,391 | 5,027 | 263 | 6,065 | 31,648 | 33.2% | 5.9% | 3.7% | 8.4% | 8.3% | 40.5% |
| Utilities | 14,442 | 376 | 616 | 3,447 | 7,955 | 42.2% | 16.4% | 5.6% | 5.1% | 3.6% | 27.1% |
| Chemicals, Health & Pharmaceuticals | 16,444 | 8,634 | 203 | 3,899 | 10,849 | 35.5% | 2.8% | 3.9% | 7.6% | 11.9% | 38.3% |
| Builders & Contractors | 14,843 | 7,132 | 205 | 4,370 | 13,739 | 27.0% | 7.5% | 5.7% | 8.2% | 10.5% | 41.1% |
| Other [1] | 42,901 | 9,941 | 1,315 | 13,927 | 31,728 | 43.5% | 4.2% | 5.1% | 4.7% | 7.8% | 34.6% |
| **Total Business Lending** | **365,804** | **147,205** | **19,090** | **86,222** | **257,929** | **37.0%** | **5.9%** | **4.6%** | **5.9%** | **8.2%** | **38.5%** |
| ***of which Total Non-performing*** | ***7,543*** | ***3,578*** | ***266*** | ***2,676*** | ***4,447*** | ***28.7%*** | ***3.8%*** | ***4.9%*** | ***9.1%*** | ***15.7%*** | ***37.7%*** |

1 'Others' comprises industries with outstandings lower than EUR 10 billion.

**Cover values including guarantees received - Business lending portfolio – 2018**

| | | | Cover type | | | | Value to Loan | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Region** | | Outstandings | Mortgages | Financial Collateral | Guarantees | Other covers | No Cover | >0% - 25% | >25%-50% | >50% - 75% | >75% - <100% | ≥ 100% |
| | Netherlands | 84,669 | 56,560 | 2,978 | 7,560 | 49,346 | 43.4% | 2.1% | 2.9% | 5.7% | 9.8% | 36.1% |
| | Belgium | 49,464 | 34,299 | 990 | 18,601 | 45,209 | 25.0% | 2.0% | 3.1% | 4.2% | 6.4% | 59.4% |
| | Germany | 15,168 | 2,288 | 71 | 1,366 | 4,064 | 62.4% | 5.0% | 3.3% | 3.9% | 2.3% | 23.1% |
| | Luxembourg | 12,903 | 6,834 | 2,626 | 3,768 | 22,132 | 23.4% | 5.6% | 12.8% | 6.1% | 3.6% | 48.5% |
| Europe | Poland | 15,982 | 7,992 | 122 | 3,054 | 26,346 | 30.2% | 3.8% | 3.4% | 7.1% | 10.1% | 45.4% |
| | United Kingdom | 14,623 | 1,031 | 1,191 | 3,411 | 7,883 | 41.1% | 18.5% | 4.8% | 3.4% | 9.9% | 22.3% |
| | Switzerland | 11,109 | 18 | 470 | 2,543 | 4,773 | 30.7% | 25.2% | 11.0% | 7.6% | 6.8% | 18.8% |
| | France | 9,828 | 7,312 | 106 | 2,631 | 4,054 | 42.1% | 2.5% | 4.8% | 4.0% | 1.0% | 45.6% |
| | Rest of Europe | 52,084 | 17,813 | 2,690 | 18,908 | 28,064 | 33.7% | 7.5% | 4.7% | 6.2% | 8.3% | 39.7% |
| America | | 47,458 | 6,105 | 6,408 | 7,007 | 39,839 | 40.1% | 5.6% | 6.1% | 6.8% | 9.1% | 32.2% |
| Asia | | 41,943 | 868 | 1,153 | 14,391 | 23,332 | 37.9% | 9.1% | 5.2% | 7.4% | 9.0% | 31.3% |
| Australia | | 7,741 | 6,074 | 226 | 939 | 1,965 | 33.6% | 3.4% | 1.8% | 3.7% | 6.3% | 51.2% |
| Africa | | 2,830 | 10 | 62 | 2,043 | 925 | 15.5% | 4.6% | 6.5% | 16.6% | 25.0% | 31.7% |
| **Total Business Lending** | | **365,804** | **147,205** | **19,090** | **86,222** | **257,929** | **37.0%** | **5.9%** | **4.6%** | **5.9%** | **8.2%** | **38.5%** |
| ***of which Non-performing*** | | ***7,543*** | ***3,578*** | ***266*** | ***2,676*** | ***4,447*** | ***28.7%*** | ***3.8%*** | ***4.9%*** | ***9.1%*** | ***15.7%*** | ***37.7%*** |

The tables above describe the collateralisation of ING's business lending portfolio. Breakdowns are provided by industry as well as by geographical region or market, based on the residence of the borrowers.

Broken down by industry, the largest increase in outstanding is attributable to Non-Bank Financial Institutions (EUR 9.1 billion, 43.1%), followed by Central Banks (EUR 7.7 billion, 22.5%), with low covers. The largest decrease in outstanding was observed in Chemicals, Health & Pharmaceuticals (EUR 8.2 billion), where the total cover percentage increased.

The proportion of the business lending portfolio in Africa and the Netherlands with no cover decreased substantially year-on-year, respectively from 15.5% to 9.2% and from 43.4% to 37.4% in 2019. All industry types experienced an increase in total covers, but while the industries' cover levels grew, only the outstanding for Utilities grew slightly faster.

The largest increases in outstanding in absolute figures were seen in Germany (21.1%) and Asia (7.6%). The increase in Germany (EUR 3.2 billion) was primarily due to increases in term loans, regulatory reserve deposits and nostro accounts. As these deposits and nostro accounts are not collateralised, this increase had only a small impact on total cover amounts.

## Credit quality

Following higher credit risk levels seen as a result of the financial crisis and economic downturn, credit quality has been improving since 2014 and this trend continued in 2019.

**Credit risk categories**

| | Regular | Watch List | Restructuring [1] | Non-performing [1] |
|---|---|---|---|---|
| Possible ratings | 1–19 | 1–19 | 11–20 | 20-22 |
| Typical ratings | 1–14 | 15–17 | 18–20 | 20-22 |
| Deterioration in risk | Not significant | Significant | Significant | Significant |
| Significant intervention | Not required | Not required | Required | Required |
| Includes impairments | No | No | Yes | Yes |
| Account Ownership | Front Office | Front Office | Front Office | Front Office |
| Credit Risk Management | Regular | Regular | Credit Restructuring | Credit Restructuring |
| Primary Manager | Front Office | Front Office | Credit Restructuring | Credit Restructuring |
| Accounting provisioning | Stage 1/2 | Stage 1/2 | Stage 2/3 | Stage 3 |

1 More information on the Restructuring and Non-performing categories can be found in the Credit restructuring section.

**Credit quality: outstandings**

| | 2019 | 2018 |
|---|---|---|
| Neither past due nor non-performing[1] | 831,340 | 816,588 |
| Business lending past due but performing (1–90 days)[1] | 7,747 | |
| Consumer lending past due but performing (1–90 days) | 3,367 | 4,440 |
| Non-performing[2] | 11,477 | 11,102 |
| **Total** | **853,930** | **832,130** |

1 For 2018 the business lending amount past due but performing could not be isolated.
2 Based on lending and investment activities.

The credit quality of the ING portfolio improved overall. For consumer lending past due but performing, the portfolio decreased by EUR 1.1 billion mainly in Retail portfolio in Belgium & Luxembourg, from EUR 1.9 billion to EUR 0.9 billion. For non-performing assets, an increase was observed mainly in Belgium & Luxembourg for Retail portfolio (EUR 0.4 billion) and Wholesale Banking portfolio (EUR 0.3 billion), and the United Kingdom WB (EUR 0.3 billion). This increase was partially offset by the decrease in non-performing exposures in Netherlands Retail (EUR 0.4 billion) and Real Estate & Other (EUR 0.4 billion).

### Past due obligations

Retail Banking continuously measures its portfolio in terms of payment arrears and on a monthly basis determines if there are any significant changes in the level of arrears. This methodology is principally extended to loans to private individuals, such as residential mortgage loans, car loans and other consumer loans. An obligation is considered 'past due' if a payment of interest or principal is more than one day late. ING aims to help its customers as soon as they are past due by communicating to remind them of their payment obligations. In its contact with the customers, ING aims to solve the (potential) financial difficulties by offering a range of measures (e.g. payment arrangements, restructuring). If the issues cannot be cured, for example because the customer is unable or unwilling to pay, the contract is sent to the recovery unit. The facility is downgraded to risk rating 20 (non-performing) when arrears exceed 90 days past due and to risk rating 21 or 22 when the contract is terminated. The table below captures all past due exposures starting from day 1.

**Aging analysis (past due but performing): Consumer lending portfolio, outstandings[1]**

| | 2019 | 2018 |
|---|---|---|
| Past due for 1–30 days | 2,564 | 3,283 |
| Past due for 31–60 days | 639 | 892 |
| Past due for 61–90 days | 163 | 265 |
| **Total** | **3,367** | **4,440** |

1 Based on consumer lending. The amount of past due but performing financial assets in respect of non-lending activities was not significant.

### Aging analysis (past due but performing): Consumer lending portfolio by geographic area, outstandings[1]

| Region | | Residential Mortgages | Other retail | 2019 | 2018 |
|---|---|---|---|---|---|
| Europe | Netherlands | 829 | 11 | 840 | 934 |
| | Belgium | 733 | 166 | 899 | 1,870 |
| | Germany | 372 | 104 | 476 | 606 |
| | Poland | 145 | 90 | 236 | 215 |
| | Spain | 21 | 36 | 56 | 46 |
| | Luxemburg | 3 | 24 | 27 | 55 |
| | France | 2 | 10 | 13 | 11 |
| | United Kingdom | 3 | | 3 | 5 |
| | Rest of Europe | 195 | 290 | 484 | 515 |
| America | | 3 | | 3 | 3 |
| Asia | | 3 | | 3 | 2 |
| Australia | | 310 | 18 | 328 | 178 |
| Africa | | | | | 1 |
| **Total** | | **2,619** | **749** | **3,367** | **4,440** |

1 Based on consumer lending. The amount of past due but performing financial assets in respect of non-lending activities was not significant.

Total past due, but performing exposure, for consumer loans decreased by EUR 1.1 billion. The improvement was mainly visible in the 1-30 days bucket driven by Belgium and the Netherlands residential mortgages due to macro-economic factors (low unemployment, low inflation and increasing house prices). This was partially offset by the increase in Australia. Less significant decreases were witnessed in the 31-60 and 61-90 days past due buckets mainly driven by the Belgium residential mortgages portfolio.

In Wholesale Banking, ING classifies the relevant obligors for business loans (governments, institutions, and corporates) as non-performing when any of the following default triggers occur:

- The borrower has failed in the payment of principal or interest/fees and such payment failure has remained unresolved for the following periods:
  - for corporates: more than 90 days;
  - for financial institutions and governments – from day 1. However, a period of 14 calendar days will be observed in order for ING to establish whether the payment default was due to non-operational reasons (i.e. the deteriorated credit quality of the financial institution) or due to operational reasons. The latter does not trigger default.
- ING believes the borrower is unlikely to pay; the borrower has evidenced significant financial difficulty, to the extent that it will have a negative impact on the future cash flows of the financial asset. The following events could be seen as indicators of financial difficulty:
  - The borrower (or third party) has started insolvency proceedings.
  - A group company/co-borrower has NPL status.
  - Significant fraud (affecting the company's ability to service its debt).
  - There is doubt as to the borrower's ability to generate stable and sufficient cash flows to service its debt.
  - Restructuring of debt.
- ING has granted concessions relating to the borrower's financial difficulty, the effect of which is a reduction in expected future cash flows of the financial asset below current carrying amount.

Further, Wholesale Banking has an individual name approach, using Early Warnings indicators to signal possible future issues in debt service.

### Aging analysis (past due but performing): Business lending, outstandings[1]

| | 2019 |
|---|---|
| Past due for 1–30 days | 6,681 |
| Past due for 31–60 days | 658 |
| Past due for 61–90 days | 408 |
| **Total** | **7,747** |

1 Wholesale aging analysis only available as of 2019

**Aging analysis (past due but performing): Business lending by geographic area, outstandings**

| Region | | 2019 |
|---|---|---|
| Europe | Netherlands | 751 |
| | Belgium | 1,028 |
| | Germany | 385 |
| | United Kingdom | 820 |
| | Spain | 688 |
| | France | 639 |
| | Luxemburg | 340 |
| | Poland | 279 |
| | Rest of Europe | 1,445 |
| America | | 1,159 |
| Asia | | 187 |
| Australia | | 23 |
| Africa | | 2 |
| **Total** | | **7,747** |

## Credit restructuring

Global Credit Restructuring (GCR) is the dedicated and independent department that deals with non-performing loans and loans that hold a reasonable probability that ING will end up with a loss, if no specific action is taken. GCR deals with accounts or portfolios requiring an active approach, which may include renegotiation of terms & conditions and business or financial restructuring. The loans are managed by GCR or by units in the various regions and business units.

ING uses three distinct statuses to categorise the management of clients with (perceived) deteriorating credit risk profiles, i.e. there is doubt as to the performance and the collectability of the client's contractual obligations:

- **Watch List**: Usually, a client is first classified as Watch List when there are concerns of any potential or material deterioration in credit risk profile that may affect the ability of the client to adhere to its debt service obligations or to refinance its existing loans. Watch List status requires more than usual attention, increased monitoring and quarterly reviews. Some clients with a Watch List status may develop into a Restructuring status or even a Recovery status.
- **Restructuring**: A client is classified in Restructuring when there are concerns about the client's financial stability, credit worthiness, and/or ability to repay, but where the situation does not require the recall or acceleration of facilities or the liquidation of collateral. ING's actions aim to maintain the going concern status of the client by:
  - Restoring the client's financial stability;
  - Supporting the client's turnaround;
  - Restoring the balance between debt and equity; and
  - Restructuring the debt to a sustainable situation.
- **Recovery:** A client is classified as in Recovery when ING and/or the client concludes that the client's financial situation cannot be restored and a decision is made to end the (credit) relationship or even to enter into bankruptcy. ING will prefer an amicable exit, but will enforce and liquidate the collateral or claim under the guarantees if deemed necessary.

Watch List, Restructuring and Recovery accounts are reviewed at least quarterly by the front office, GCR, and the relevant credit risk management executives.

## Non-performing loans

ING's loan portfolio is under constant review. Loans with past due financial obligations of more than 90 days are reclassified as non-performing. For commercial lending portfolios, there generally are reasons for declaring a loan non-performing prior to being 90 days past due. These reasons include, but are not limited to, ING's assessment of the customer's perceived inability to meet its financial obligations, or the customer filing for bankruptcy or bankruptcy protection.

The table below represents the breakdown by industry of credit risk outstandings for lending and investment positions that have been classified as non-performing.

## Non-performing Loans: outstandings by economic sector and business lines[1]

| | Wholesale Banking | | Retail Benelux | | Retail Challengers & Growth Markets | | Corporate Line | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Industry** | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Private Individuals | 0 | 1 | 2,173 | 2,163 | 1,573 | 1,535 | | | 3,746 | 3,698 |
| Natural Resources | 1,108 | 925 | 35 | 43 | 53 | 54 | | | 1,196 | 1,022 |
| Food, Beverages & Personal Care | 599 | 372 | 351 | 294 | 168 | 109 | | | 1,119 | 775 |
| Transportation & Logistics | 651 | 599 | 96 | 177 | 40 | 28 | | | 787 | 804 |
| Services | 320 | 260 | 357 | 265 | 60 | 38 | | | 737 | 563 |
| Builders & Contractors | 265 | 405 | 258 | 332 | 168 | 152 | | | 691 | 889 |
| Real Estate | 312 | 823 | 311 | 333 | 9 | 3 | | | 631 | 1,159 |
| General Industries | 248 | 373 | 204 | 186 | 153 | 135 | | | 605 | 694 |
| Non-Bank Financial Institutions | 426 | 25 | 34 | 27 | 2 | 2 | | | 462 | 54 |
| Retail | 89 | 80 | 172 | 134 | 63 | 44 | | | 325 | 258 |
| Other[2] | 467 | 507 | 326 | 274 | 110 | 90 | 275 | 314 | 1,178 | 1,187 |
| **Total** | **4,487** | **4,370** | **4,316** | **4,229** | **2,399** | **2,188** | **275** | **314** | **11,477** | **11,102** |

1 Based on Lending and Investment outstandings.
2 Economic sectors not specified in above overview are grouped in Other.

## Non-performing Loans: outstandings by economic sectors and geographical area

| | Region | | | | | | | | | | | | | Total | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industry** | Netherlands | Belgium | Germany | Poland | Spain | United Kingdom | France | Luxemburg | Rest of Europe | America | Asia | Australia | Africa | 2019 | 2018 |
| Private Individuals | 840 | 1,271 | 585 | 134 | 195 | 4 | 14 | 24 | 411 | 4 | 3 | 261 | 1 | 3,746 | 3,698 |
| Natural Resources | 83 | 21 | | 28 | | 63 | | | 254 | 533 | 84 | 111 | 20 | 1,196 | 1,022 |
| Food, Beverages & Personal Care | 315 | 153 | 63 | 117 | 1 | 12 | 68 | 1 | 109 | 254 | 26 | | | 1,119 | 775 |
| Transportation & Logistics | 432 | 48 | 1 | 31 | 47 | 49 | | 3 | 88 | 32 | 10 | 46 | | 787 | 804 |
| Services | 224 | 377 | 0 | 36 | | | | 3 | 49 | 42 | 6 | | | 737 | 563 |
| Builders & Contractors | 88 | 226 | 1 | 103 | 1 | | | 3 | 230 | 39 | | | | 691 | 889 |
| Real Estate | 219 | 225 | 0 | 96 | 19 | | 7 | 28 | 27 | 8 | | 4 | | 631 | 1,159 |
| General Industries | 176 | 148 | 12 | 89 | | 3 | | 1 | 127 | 48 | 1 | | | 605 | 693 |
| Non-Bank Financial Institutions | 53 | 8 | | 3 | 7 | 0 | 0 | 5 | 14 | 107 | | 264 | | 462 | 54 |
| Retail | 74 | 147 | | 40 | | 4 | 7 | 1 | 52 | | | | | 325 | 258 |
| Other [1] | 464 | 239 | 44 | 130 | | 10 | 1 | 9 | 173 | 34 | 23 | | 51 | 1,178 | 1,187 |
| **Total** | **2,968** | **2,864** | **705** | **805** | **270** | **144** | **96** | **79** | **1,534** | **1,099** | **154** | **686** | **71** | **11,477** | **11,102** |

1 Economic sectors not specified in above overview are grouped in Other.

The non-performing portfolio increased slightly during 2019. The increase was mainly visible in Challengers & Growth and Wholesale Banking. The increase in Challengers & Growth was due to a combination of various smaller items, while the increase in Wholesale Banking was mainly driven by Food, Beverages & Personal Care and Natural Resources. This was largely offset by a significant decrease in Real Estate NPL outstandings. The largest increases were witnessed in Belgium in the services industry, the natural resources industry in the Americas and in Australia over various smaller items. The largest decreases were visible in the Netherlands in real estate and private individuals.

### Forbearance

Forbearance occurs when a client is unable to meet their financial commitments due to financial difficulties it faces or is about to face and ING grants concessions towards this client. Forborne assets are assets in respect of which forbearance measures have been granted.

Forbearance may enable clients experiencing financial difficulties to continue repaying their debt.

For business customers, ING mainly applies forbearance measures to support clients with fundamentally sound business models that are experiencing temporary difficulties with the aim of maximising the client's repayment ability and therewith avoiding a default situation or helping the client to return to a performing situation.

For ING retail units, clear criteria have been established to determine whether a client is eligible for forbearance process. Specific approval mandates are in place to approve the measures, as well as procedures to manage, monitor and report the forbearance activities.

ING reviews the performance of forborne exposures at least quarterly, either on a case-by-case (business) or on a portfolio (retail) basis.

All exposures are eligible for forbearance measures, i.e. both performing (Risk Ratings 1-19) and non-performing (Risk Ratings 20-22) exposures. ING uses specific criteria to move forborne exposures from non-performing to performing or to remove the forbearance statuses that are consistent with the corresponding EBA standards. An exposure is reported as forborne for a minimum of two years. An additional one year probation period is observed for forborne exposures that move from non-performing back to performing.

The prior period outstandings and performing/ non-performing amounts in the tables Summary Forborne assets have been updated by EUR 46 million to improve consistency and comparability to the current year presentation. This is also applicable to the other tables in this section Forbearance.

**Summary Forborne assets**

| | 2019 | | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| **Business Line** | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | % of total portfolio | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | % of total portfolio |
| Wholesale Banking | 4,632 | 2,699 | 1,932 | 1.7% | 5,081 | 3,088 | 1,994 | 1.9% |
| Retail Banking | 4,861 | 2,686 | 2,175 | 1.1% | 5,012 | 2,862 | 2,151 | 1.2% |
| **Total** | **9,492** | **5,385** | **4,107** | **1.3%** | **10,094** | **5,949** | **4,145** | **1.4%** |

**Summary Forborne portfolio by forbearance type**

| | 2019 | | | | 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| **Forbearance type** | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | % of total portfolio | Out standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | % of total portfolio |
| Loan modification | 8,285 | 4,800 | 3,485 | 1.1% | 8,410 | 4,827 | 3,583 | 1.2% |
| Refinancing | 1,208 | 585 | 622 | 0.2% | 1,684 | 1,122 | 561 | 0.2% |
| **Total** | **9,492** | **5,385** | **4,107** | **1.3%** | **10,094** | **5,949** | **4,145** | **1.4%** |

As per December 2019 ING's total forborne assets decreased by EUR 0.6 billion (6%) against December 2018 to EUR 9.5 billion, mainly driven by Wholesale Banking (-EUR 0.5 billion).

## Wholesale Banking

As per December 2019, Wholesale Banking forborne assets amounted to EUR 4.6 billion, which represented 1.7% of the total Wholesale Banking portfolio.

**Wholesale Banking: Forborne portfolio by geographical area**

| | | 2019 | | | 2018 | | |
|---|---|---|---|---|---|---|---|
| **Region** | | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming |
| | Netherlands | 822 | 410 | 412 | 1,138 | 687 | 451 |
| | Belgium | 41 | 16 | 25 | 131 | 102 | 29 |
| | Germany | 246 | 182 | 63 | 127 | 94 | 33 |
| | United Kingdom | 332 | 251 | 81 | 287 | 246 | 41 |
| Europe | Italy | 197 | 115 | 83 | 388 | 113 | 275 |
| | Ukraine | 169 | 77 | 93 | 297 | 108 | 189 |
| | Norway | 151 | 124 | 27 | 258 | 236 | 22 |
| | Poland | 134 | 31 | 103 | 190 | 78 | 113 |
| | Rest of Europe | 502 | 322 | 180 | 462 | 288 | 174 |
| America | | 1,315 | 759 | 556 | 1,173 | 695 | 478 |
| Asia | | 316 | 206 | 109 | 378 | 300 | 78 |
| Australia | | 214 | 85 | 129 | 104 | 86 | 17 |
| Africa | | 192 | 122 | 71 | 148 | 55 | 93 |
| **Total** | | **4,632** | **2,699** | **1,932** | **5,081** | **3,088** | **1,994** |

**Wholesale Banking: Forborne assets by economic sector**

| | 2019 | | | 2018 | | |
|---|---|---|---|---|---|---|
| **Industry** | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming |
| Natural Resources | 1,587 | 909 | 678 | 1,474 | 943 | 532 |
| Transportation & Logistics | 674 | 362 | 313 | 833 | 445 | 388 |
| General Industries | 427 | 286 | 142 | 402 | 190 | 212 |
| Food, Beverages & Personal Care | 375 | 227 | 148 | 244 | 161 | 83 |
| Real Estate | 374 | 207 | 167 | 998 | 601 | 397 |
| Chemicals, Health & Pharmaceuticals | 212 | 209 | 3 | 189 | 171 | 19 |
| Builders & Contractors | 195 | 79 | 116 | 145 | 37 | 109 |
| Utilities | 188 | 55 | 133 | 181 | 30 | 152 |
| Services | 129 | 69 | 60 | 129 | 76 | 53 |
| Retail | 114 | 92 | 22 | 118 | 84 | 34 |
| Automotive | 108 | 72 | 36 | 134 | 131 | 3 |
| Other | 248 | 134 | 114 | 233 | 220 | 12 |
| **Total** | **4,632** | **2,699** | **1,932** | **5,081** | **3,088** | **1,994** |

The main concentration of forborne assets in a single country was in the Netherlands with 18% (2018: 22%) of the total Wholesale Banking forborne assets and 21% (2018: 23%) of the total non-performing forborne assets.

Wholesale Banking forborne assets decreased by EUR 0.5 billion compared to 2018, of which the performing forborne assets decreased by EUR 0.4 billion. The decrease of the performing forborne assets was attributed mostly to a few cured large entities which exited forborne status.

Wholesale Banking forborne assets were mainly concentrated in Natural Resources, Transportation & Logistics and General Industries. Together they accounted for 58% of the total Wholesale Banking forborne assets and 59% of the total Wholesale Banking non-performing forborne assets. Back in 2018, the main concentration was witnessed in Natural Resources, Real Estate and

Transportation & Logistics, with 65% of the total WB forborne. A significant decrease in forborne assets was visible in the Real Estate industry (EUR 0.6 billion) during 2019, followed by the Transportation & Logistics (-EUR 0.2 billion), partly offset by the Food, Beverages & Personal Care and the Natural Resources (+EUR 0.1 billion each).

### Retail Banking

As per end of December 2019, Retail Banking forborne assets amounted to a total of EUR 4.9 billion, which represented 1.1% of the total Retail Banking portfolio.

**Retail Banking: Forborne assets by geographical area**

| | | 2019 | | | 2018 | | |
|---|---|---|---|---|---|---|---|
| Region | | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming | Out-standings | Of which: Perfor-ming | Of which: Non-Perfor-ming |
| Europe | Netherlands | 2,212 | 1,367 | 845 | 2,461 | 1,514 | 946 |
| | Belgium | 1,149 | 435 | 714 | 1,046 | 383 | 663 |
| | Germany | 425 | 294 | 131 | 462 | 337 | 126 |
| | Turkey | 314 | 184 | 130 | 273 | 197 | 77 |
| | Poland | 209 | 101 | 109 | 216 | 115 | 101 |
| | Romania | 101 | 55 | 46 | 69 | 36 | 33 |
| | Italy | 25 | 13 | 12 | 25 | 13 | 12 |
| | Spain | 25 | 13 | 12 | 39 | 23 | 16 |
| | Rest of Europe | 43 | 22 | 22 | 37 | 18 | 19 |
| America | | 2 | 1 | 1 | 1 | | 1 |
| Asia | | 1 | 0 | 1 | 3 | 2 | 1 |
| Australia | | 354 | 201 | 153 | 381 | 225 | 156 |
| Africa | | | | | | | |
| **Total** | | **4,861** | **2,686** | **2,175** | **5,012** | **2,862** | **2,151** |

The main concentration of forborne assets in a single country was in the Netherlands with 46% (2018: 49%) of the total Retail Banking forborne assets and 39% (2018: 44%) of the non-performing forborne assets.

## Loan Loss Provisioning

Since 1 January 2018, ING has recognised loss allowances based on the expected credit loss model (ECL) of IFRS 9, which is designed to be forward-looking. The IFRS 9 impairment requirements are applicable to on-balance sheet financial assets measured at amortised cost or fair value through other comprehensive income (FVOCI), such as loans, debt securities and lease receivables, as well as off-balance sheet items such as undrawn loan commitments, certain financial guarantees, and undrawn committed revolving credit facilities. These financial instruments are divided into three groups, depending on the stage of credit quality deterioration.

### IFRS 9 models

The IFRS 9 models leverage the advanced internal rating-based (AIRB) models (PD, LGD, EAD), which include certain required conservatism. In order to include IFRS 9 requirements, such regulatory conservatism is removed from the ECL parameters (PD, LGD and EAD). The IFRS9 models apply two types of adjustments to the ECL parameters: (1) to economic outlook and (2) for stage 2 and stage 3 assets only, to the lifetime horizon. The IFRS9 model parameters are estimated based on statistical techniques and supported by expert judgement.

### Portfolio quality

As shown in the table below, 94.0% of the total gross carrying amounts is classified as stage 1, mainly composed of investment grade, while stage 2 and 3 make up 4.7% and 1.3% of total amounts, respectively.

## Gross Carrying amount per IFRS 9 stage and rating class[1,2,3,4]

| 2019 | | Stage 1 | | Stage 2 | | Stage 3 | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| Rating class | | Gross Carrying Amount | Provisions | Gross Carrying Amount | Provisions | Gross Carrying Amount | Provisions | Gross Carrying Amount | Provisions |
| Investment grade | 1 (AAA) | 75,144 | 1 | | | | | 75,144 | 1 |
| | 2-4 (AA) | 82,992 | 3 | 28 | | | | 83,020 | 3 |
| | 5-7 (A) | 131,931 | 11 | 273 | | | | 132,204 | 11 |
| | 8-10 (BBB) | 295,449 | 55 | 4,905 | 6 | | | 300,353 | 61 |
| Non-Investment grade | 11-13 (BB) | 194,643 | 209 | 7,925 | 54 | | | 202,568 | 263 |
| | 14-16 (B) | 36,683 | 202 | 18,416 | 367 | | | 55,099 | 569 |
| | 17 (CCC) | 405 | 7 | 4,067 | 146 | | | 4,472 | 153 |
| Substandard grade | 18 (CC) | | | 3,253 | 160 | | | 3,253 | 160 |
| | 19 (C) | | | 2,216 | 148 | | | 2,216 | 148 |
| NPL grade | 20-22 (D) | | | | | 10,955 | 3,275 | 10,955 | 3,275 |
| **Total** | | **817,247** | **490** | **41,082** | **881** | **10,955** | **3,275** | **869,284** | **4,646** |

1 Compared to the credit risk portfolio, the differences are mainly undrawn committed amounts (EUR 115 billion) not included in Credit outstandings and non-IFRS 9 eligible assets (EUR 100 billion, mainly guarantees, letters of credit and pre-settlement exposures) included in Credit outstandings.
2 For a reference to the Notes in the consolidated financial statements, we refer to the table 'Reconciliation between credit risk categories and financial position', page 181.
3 IAS 37 Off-Balance provisions (EUR 93.3 million) are excluded.
4 The table is generated in 2019 for the first time, no comparable schedule for 2018 available.

## Changes in loan loss provisions and gross carrying amounts

**Changes in gross carrying amounts and loan loss provisions**[1,2,3,4]

| 2019 | Stage 1 | | Stage 2 | | Stage 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Gross carrying amount | Provisions | Gross carrying amount | Provisions | Gross carrying amount | Provisions | Gross carrying amount | Provisions |
| Opening balance | **788,537** | **501** | **46,949** | **925** | **10,758** | **3,141** | **846,244** | **4,568** |
| Transfer into 12-month ECL (Stage 1) | 12,856 | 30 | -12,579 | -253 | -277 | -23 | | -246 |
| Transfer into lifetime ECL not credit impaired (Stage 2) | -21,577 | -73 | 22,382 | 474 | -805 | -81 | | 320 |
| Transfer into lifetime ECL credit impaired (Stage 3) | -2,210 | -6 | -1,753 | -135 | 3,964 | 1,113 | | 972 |
| Net remeasurement of loan loss provisions | | -77 | | 36 | | 283 | | 242 |
| New financial assets originated or purchased | 180,605 | 205 | | | | | 180,605 | 205 |
| Financial assets that have been derecognised | -126,082 | -103 | -9,108 | -162 | -1,659 | -137 | -136,849 | -402 |
| Net drawdowns and repayments | -14,880 | | -4,807 | | 1 | | -19,686 | |
| Changes in models/risk parameters | | 15 | | 2 | | -8 | | 9 |
| **Increase in loan loss provisions** | | **-9** | | **-39** | | **1,147** | | **1,099** |
| Write-offs | -1 | -1 | -2 | -2 | -1,027 | -1,028 | -1,030 | -1,031 |
| Recoveries of amounts previously written off | | | | | | 55 | | 55 |
| Foreign exchange and other movements | | -1 | | -3 | | -41 | | -45 |
| **Closing balance** | **817,247** | **490** | **41,082** | **881** | **10,955** | **3,275** | **869,284** | **4,646** |

1 At the end of December 2019, the Gross carrying amounts included loans and advances to central banks (EUR 51.2 billion), loans and advances to banks (EUR 35.1 billion), financial assets at FVOCI (EUR 32.2 billion), securities at amortised cost (EUR 46.1 billion), loans and advances to customers (EUR 616.4 billion) and contingent liabilities (credit replacements) in scope of IFRS 9 (EUR 115.7 billion) and excludes receivables related to securities in reverse repurchase transaction (EUR -9.9 billion), cash collateral in respect of derivatives (EUR -10.2 billion), the value adjustment hedged items in respect of portfolio hedges (EUR -3.9 billion), a receivable that is offsetted by a liquidity facility (EUR -1.3 billion), de-netting of cash pool balances (EUR -1.8 billion) and other differences amounting to EUR -0.3 billion.
2 Stage 3 Lifetime credit impaired includes EUR 1 million Purchased or Originated Credit Impaired (2018: EUR 2 million).
3 At the end of December 2019, the stock of provisions included provisions for loans and advances to central banks (EUR 1 million), loans and advances to banks (EUR 9 million), financial assets at FVOCI (EUR 10 million), securities at amortised cost (EUR 10 million), provisions for loans and advances to customers (EUR 4,590 million) and provisions for contingent liabilities (credit replacements) recorded under Provisions (EUR 25 million).
4 The table is generated in 2019 for the first time, no comparable schedule for 2018 available.

The table above provides a reconciliation by stage of the gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees. The transfers of financial instruments represents the impact of stage transfers upon the gross carrying/nominal amount and associated allowance for ECL. This includes the net remeasurement of ECL arising from stage transfers, for example, moving from a 12-month (stage 1) to a lifetime (stage 2) ECL measurement basis.

The net remeasurement line represents the changes in provisions for facilities that remain in the same stage.

The following table shows the reconciliations from the opening to the closing balance of the loan loss provisions in 2018.

**Changes in loan loss provisions**

| 2018 | Stage 1 | Stage 2 | Stage 3 | Total |
|---|---|---|---|---|
| | Provisions | Provisions | Provisions | Provisions |
| Opening balance | **438** | **955** | **3,923** | **5,316** |
| Transfer into 12-month ECL (Stage 1) | 19 | -206 | -23 | -209 |
| Transfer into lifetime ECL not credit impaired (Stage 2) | -62 | 501 | -56 | 383 |
| Transfer into lifetime ECL credit impaired (Stage 3) | -7 | -86 | 707 | 615 |
| Net remeasurement of loan loss provisions | 17 | -55 | 312 | 274 |
| Changes in models/risk parameters | | | | |
| New financial assets originated or purchased | 213 | | | 212 |
| Financial assets that have been derecognised | -101 | -145 | -341 | -588 |
| **Increase in loan loss provisions** | **80** | **9** | **599** | **688** |
| Write-offs | | | -1,043 | -1,044 |
| Recoveries of amounts previously written off | | | 53 | 53 |
| Foreign exchange and other movements | -18 | -38 | -390 | -446 |
| **Closing balance** | **501** | **925** | **3,141** | **4,568** |

The following table provides the following information:

- Information on financial assets that were modified during the year (i.e. qualified as forborne) while they had a loss allowance measured at an amount equal to lifetime ECL (i.e. stage 2).
- Financial assets that were reclassified to stage 1 during the period.

**Financial assets modified**

| | 2019 | 2018 |
|---|---|---|
| **Financial assets modified during the period** | | |
| Amortised cost before modification | 2,662 | 2,503 |
| Net modification results | 164 | -50 |
| **Financial assets modified since initial recognition** | | |
| Gross carrying amount at 31 December of financial assets for which loss allowance has changed to 12-month measurement during the period | 689 | 908 |

## Sensitivity analysis of key sources of estimation uncertainty

The introduction of IFRS 9, with its inherent complexities and potential impact on the carrying amounts of our assets and liabilities, represents a key source of estimation uncertainty. In particular, the Group's reportable ECL numbers are most sensitive to the forward-looking macroeconomic forecasts used as model inputs, the probability-weights applied to each of the three scenarios, and the criteria for identifying a significant increase in credit risk. As such, these crucial components require consultation and management judgement, and are subject to extensive governance.

### Forward-looking macroeconomics used as model inputs

As a baseline for IFRS 9, ING Group uses the consensus outlook for economic variables. The Oxford Economics' Global Economic Model (OEGEM) is then used to complement the consensus with consistent projections for variables for which there are no consensus estimates available (most notably House Price Index (HPI) and unemployment), and to ensure general consistency of the scenarios.

The Group's consensus view of the baseline scenario suggests economic growth will level off over the initial (three year) forecast period, as the pace of expansion in the main advanced economies and emerging markets is expected to wane. For the eurozone, as output gaps close and monetary policy begins to normalise, growth is expected to decline. For the US, the near-term outlook is still positive. The Group continues to monitor the potential escalation of an international trade conflict, and the likely outcome of any Brexit deal, which, at present remains unclear.

The downside scenario sees a relatively synchronised global downturn with economic growth in advanced economies falling close to zero, and emerging markets suffering a pronounced slowdown. The upside scenario sees economic growth returning to rates not seen since the financial crisis and a return to pre-crisis unemployment rates.

The relevance and selection of macro-economic variables is defined by the ECL models under credit risk model governance. The scenarios are reviewed and challenged by two panels. The first panel consists of economic experts from Global Markets Research and Risk and Modelling specialists, while the second panel consists of relevant senior managers.

### Probability weights applied to each of the three scenarios

The alternative scenarios are technically based on the forecast errors of the OEGEM. To understand the baseline level of uncertainty around any forecast, Oxford Economics keeps track of all its forecast errors of the past 20 years. The distribution of forecast errors for GDP, unemployment, house prices and share prices is applied to the baseline forecast creating a broad range of alternative outcomes. In addition, to understand the balance of risks facing the economy in an unbiased way, Oxford Economics runs a survey with respondents from around the world and across a broad range of industries. In this survey the respondents put forward their views of key risks. Following the survey results, the distribution of forecast errors (that is being used for determining the scenarios) may be skewed.

For the downside scenario, ING has chosen for the 90th percentile of that distribution because this corresponds with how within risk management earnings at risk is defined within the Group. The upside scenario is represented by the 10th percentile of the distribution. The distribution of the scenarios, taking into account the applicable percentile of the distribution, results in the upside and downside scenario being weighted at 20% each. Consequently, the base case scenario has a 60% probability weighting. Please note that, given their technical nature, the downside scenario and upside scenario are not explicitly based on a specific narrative.

Based on the above two sources of estimation uncertainty, analysis on the sensitivity of key forward-looking macroeconomic inputs used in the ECL collective-assessment modelling process and the probability-weights applied to each of the three scenarios is presented below. The countries included in the analysis are the Group's most significant geographic regions, in terms of both gross contribution to reportable ECL, and sensitivity of ECL to forward-looking macroeconomics. Accordingly, the Group considers these portfolios to present the most significant risk of resulting in a material adjustment to the carrying amount of financial assets within the next financial year. The Group also observes that, in general, the Wholesale business is more sensitive to the impact of forward-looking macroeconomic scenarios.

Real GPD, unemployment rate and HPI (in that order) are considered the variables with the largest impact on the LLP. Exposure class based the largest impact is observed in Corporates, followed by Retail Mortgages, SMEs and Retail non-SMEs. This is supported by statistical analysis. These forward-looking macroeconomics (among others) are used in the calculation of the Group's un-weighted ECLs, to which are applied the probability-weightings as disclosed, to arrive at the reportable ECL for collectively-assessed assets. While the table does give a high-level indication of the sensitivity of the outputs to the different scenarios, it does not provide insight on the interdependencies and correlations between different macroeconomic variable inputs. Furthermore, in addition to forward-looking macroeconomics, there are a number of other model inputs and processes which contribute to the calculation of un-weighted ECLs. Any sensitivity analysis which relies on this data should consider these complexities.

## Sensitivity analysis[1,2,3]

| | | 2020 | 2021 | 2022 | Un-weighted ECL (Eur mln) | Probability-weighting | Reportable ECL (Eur mln)[4] |
|---|---|---|---|---|---|---|---|
| **Netherlands** | | | | | | | |
| Upside scenario | Real GDP | 2.3 | 3.5 | 3.2 | | | |
| | Unemployment | 2.8 | 2.4 | 2.3 | 370 | 20% | |
| | HPI | 14.1 | 11.3 | 2.9 | | | |
| Baseline Scenario | Real GDP | 1.4 | 1.5 | 1.6 | | | |
| | Unemployment | 3.6 | 3.9 | 4.2 | 416 | 60% | 428 |
| | HPI | 3.3 | 2.9 | 2.8 | | | |
| Downside scenario | Real GDP | -0.7 | -0.9 | 0.5 | | | |
| | Unemployment | 5.0 | 6.3 | 7.1 | 520 | 20% | |
| | HPI | -7.5 | -7.0 | 2.7 | | | |
| **Germany** | | | | | | | |
| Upside scenario | Real GDP | 2.6 | 2.8 | 1.8 | | | |
| | Unemployment | 2.4 | 1.7 | 1.4 | 458 | 20% | |
| | HPI | 9.7 | 7.0 | 6.4 | | | |
| Baseline Scenario | Real GDP | 0.8 | 1.1 | 1.3 | | | |
| | Unemployment | 3.2 | 3.2 | 3.3 | 495 | 60% | 502 |
| | HPI | 6.1 | 3.5 | 2.9 | | | |
| Downside scenario | Real GDP | -1.2 | -1.7 | 0.5 | | | |
| | Unemployment | 4.3 | 4.8 | 5.2 | 567 | 20% | |
| | HPI | 2.5 | -0.3 | -1.1 | | | |
| **Belgium** | | | | | | | |
| Upside scenario | Real GDP | 2.3 | 2.6 | 2.0 | | | |
| | Unemployment | 5.5 | 5.4 | 5.3 | 323 | 20% | |
| | HPI | 5.1 | 4.2 | 4.3 | | | |
| Baseline Scenario | Real GDP | 1.1 | 1.2 | 1.3 | | | |
| | Unemployment | 5.8 | 5.9 | 6.1 | 350 | 60% | 357 |
| | HPI | 3.5 | 3.4 | 3.4 | | | |
| Downside scenario | Real GDP | -0.4 | -0.2 | 1.0 | | | |
| | Unemployment | 7.5 | 8.4 | 8.4 | 411 | 20% | |
| | HPI | 1.5 | 2.6 | 2.4 | | | |
| **United States** | | | | | | | |
| Upside scenario | Real GDP | 2.6 | 4.1 | 3.8 | 74 | 20% | 144 |
| | Unemployment | 2.6 | 1.7 | 1.5 | | | |
| | HPI | 5.0 | 8.0 | 8.1 | | | |
| Baseline Scenario | Real GDP | 1.8 | 1.8 | 1.9 | | | |
| | Unemployment | 3.7 | 3.7 | 3.8 | 127 | 60% | |
| | HPI | 2.6 | 2.6 | 2.8 | | | |
| Downside scenario | Real GDP | -0.6 | -0.5 | 0.3 | | | |
| | Unemployment | 5.2 | 6.5 | 7.1 | 267 | 20% | |
| | HPI | 0.1 | -3.1 | -3.4 | | | |

1 Real GDP, in % year-on-year change
2 Unemployment in % of total labour force
3 House price index (HPI) in % year-on-year
4 Sensitivity does not include the effect of manual adjustments, which are not material

### Criteria for identifying a significant increase in credit risk

All assets and off-balance sheet items are in scope of IFRS 9 impairment and which are subject to collective ECL assessment are allocated a 12-month ECL if deemed to belong in Stage 1, or a lifetime ECL if deemed to belong in Stages 2 and 3. An asset belongs in Stage 2 if it is considered to have experienced a significant increase in credit risk since initial origination or purchase. The stage allocation process involves an asset's derived scenario weighted average PD being assessed against a set of PD threshold bandings, which determines the appropriate staging and ECL. Stage 2 is triggered when either a threshold for absolute change in lifetime PD or relative change in lifetime PD is hit. The thresholds for the absolute change in lifetime PD vary between 75bps for Retail portfolios, 100bp for Wholesale and 250bps for SMEs, based on the characteristics of the specific portfolio. The threshold for the relative change in LT PD are inversely correlated with the PD at origination; the higher the PD at origination, the lower the threshold. Despite this, the relative threshold is punitive for Investment grade assets while the absolute threshold primarily affects Speculative grade assets.  The Group reports total ECL collective-assessment of EUR 1,291 million (2018: EUR 1,391 million).

The setting of PD threshold bandings requires management judgement, and is a key source of estimation uncertainty. To demonstrate the sensitivity of the ECL to these PD thresholds bandings, analysis was run on all collectively-assessed assets, which assumed all assets were below the threshold, and apportioned a 12 month ECL. On the same asset base, analysis was run which assumed all performing assets were above the threshold, and apportioned a lifetime ECL. This gave rise to a hypothetical collective-assessment ECLs of EUR 866 million (2018: EUR 888 million) and EUR 2,665 million (2018: EUR 3,333 million) respectively. Please note that in this analysis all other ECL risk parameters (except for the stage) were kept equal.

It should be noted that the lifetime PD thresholds are not the only drivers of stage allocation. An asset can change stages by virtue of being in arrears, on a Watch List, being forborne etc. Refer to section 1.6.8 of Note 1 'Accounting Policies' for an exhaustive list. Furthermore, this analysis is rudimentary in that other parameters would change when an asset changes stages.

# Market risk

## Introduction

Market risk is the risk that movements in market variables, such as interest rates, equity prices, foreign exchange rates, credit spreads and real estate prices negatively impact the bank's earnings, capital, market value or liquidity position. Market risk either arises through positions in banking books or trading books. The banking book positions are intended to be held for the long-term (or until maturity) or for the purpose of hedging other banking book positions. The trading book positions are typically held with the intention of short-term trading or in order to hedge other positions in the trading book. This means that financial instruments in the trading books should be free of trade restrictions. Policies and processes are in place to monitor the inclusion of positions in either the trading or banking book as well as to monitor the transfer of risk between the trading and banking books.

ING recognises the importance of sound market risk management and bases its market risk management framework on the approach to identify, assess, control and manage market risks. The approach consists of a cycle of five recurring activities: risk identification, risk assessment, risk control, risk monitoring and risk reporting.

- Risk identification is a joint effort of the first and second lines of defence out of the three lines of the defence. The goal of risk identification is to detect potential new risks and any changes in known risks. See the Risk Governance paragraph under the Group risk Management section for more on our 'three lines of defence' governance model;
- Identified risks are assessed and measured by means of various risk metrics to determine the importance of the risk to ING and subsequently to identify the control measures needed;
- Risk control measures used by ING include policies, procedures, minimum standards, limit frameworks, buffers and stress tests;
- Risk monitoring occurs to check if the implemented risk controls are executed, complied with across the organisation, and are effective; and
- Market risk management results and findings are reported to the necessary governing departments and approval bodies.

## Governance

A governance framework has been established defining specific roles and responsibilities of business management units, market risk management units, and internal approval bodies per activity.

Supervision of market risk falls under the responsibility of the MBB and is delegated to the ALCO function, where ALCO Bank is the highest approval authority and sets the market risk appetite. ALCO Bank monitors ING's adherence to the risk appetite for market risk and sets additional limits where appropriate. These limits are cascaded through the organisation through lower level ALCOs. This ALCO structure facilitates top-down risk management, limit setting, and the monitoring and control of market risk.

The monitoring and control of market risk is the responsibility of the Financial Risk (FR) department and Financial Institutions – Financial Markets (FI-FM) Risk. FR and FI-FM Risk are the designated departments of the second line of defence that report to the CRO function and are responsible for the design and execution of the bank's market risk and counterparty credit risk management functions in support of the ALCO function. FR focuses on the market risks in the banking books, whereas FI-FM Risk is responsible for counterparty credit risk and market risks resulting from the Financial Markets trading books. FR and FI-FM Risk are responsible for determining adequate policies and procedures for actively managing market risk in the banking and trading books and for monitoring ING's compliance with these guidelines.

FR and FI-FM Risk also maintain a limit framework in line with ING's Risk Appetite Framework. The businesses are responsible for adhering to limits that are ultimately approved by the ALCO Bank. Limit excesses are reported to senior management on a timely basis and the business is required to take appropriate actions to reduce the risk position. To adhere to the established limit framework, ING implements hedging and risk mitigation strategies that range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at the portfolio level.

The organisational structure facilitates top-down risk management by recognising that risk taking and risk management to a large extent occur at the regional/local level. Bottom-up reporting from regional/local units to head office units allows each management level to fully assess the market risks relevant at the respective levels.

Several committees govern communication between the parties involved in market risk management. These committees have a functional reporting line to ALCO Bank, which derives its global discretion from the ING Group Decision Structure and as such is the highest level ING Bank body with the exception of the Management Board Banking (MBB). The Market Risk Model Committee (MRMC) is the dedicated authority within ING for the approval of all trading and banking risk models, methodologies and parameters related to market risk. The Trading Pricing Model Committee (TPMC) approves pricing models for trading and banking books. Financial Risk and FI-FM Risk departments provide systematic risk reporting to the EB and MBB, the senior executive management of the CRO function and the senior executive management of related business functions.

The FI-FM Risk Management Framework governs the boundary between trading books and banking books. It defines the activities ING considers to be trading according to a regulatory definition and for own funds requirement purposes. The trading activity is systematically reviewed and positions are assessed against the mandates jointly by the first and second lines of defence. As specified in the framework, the transfer of risk or the transfer of positions between banking and trading books is in principle not allowed but in exceptional cases when a re-designation is deemed necessary, the re-designation should be approved by senior management.

The following market risk paragraphs elaborate on the various elements of the risk management framework for:

- Market risk economic capital (trading and banking books);
- Market risks in banking books; and
- Market risks in trading books.

## Market risk economic capital (trading and banking books)

Economic capital for market risk is the economic capital necessary to withstand unexpected value movements due to changes in market variables and model risk.

Economic capital for market risk is calculated for exposures both in trading portfolios and banking portfolios and includes interest rate risk, credit spread risk, equity price risk, foreign exchange rate risk, real estate risk, model risks and pension risk. Economic capital for market risk is calculated using internally developed methodologies with a 99.9% confidence level and a horizon of one year.

For the trading books and the linear interest rate risk and equity investments in the banking books, the Value at Risk (VaR) is taken as a starting point for the economic capital calculations for market risk. The VaR is measured at a 99% confidence level, a one day holding period.

To arrive at the economic capital for market risk, a simulation based model is used which includes scaling to the required confidence level and holding period. In determining this scaling factor, other factors are also taken into account like the occurrence of large market movements (events).

Embedded options, e.g. the prepayment option and offered rate option in mortgages in the banking books, result in non-linear interest rate risk in the banking books. The embedded options are economically hedged using a delta-hedging methodology, leaving the mortgage portfolio exposed to convexity risk, volatility risk and model risk. For the calculation of economic capital for this non-linear interest rate risk, ING performs a Monte Carlo simulation.

Real estate price risk includes the market risks in both the real estate investment and the development portfolio of the ING Wholesale Banking business line. The economic capital for real estate price risk is calculated by stressing the underlying market variables.

While aggregating the different economic capital market risk figures for the different portfolios, diversification benefits (based on stressed correlations) are taken into account as it is not expected that all extreme market movements will appear at the same moment.

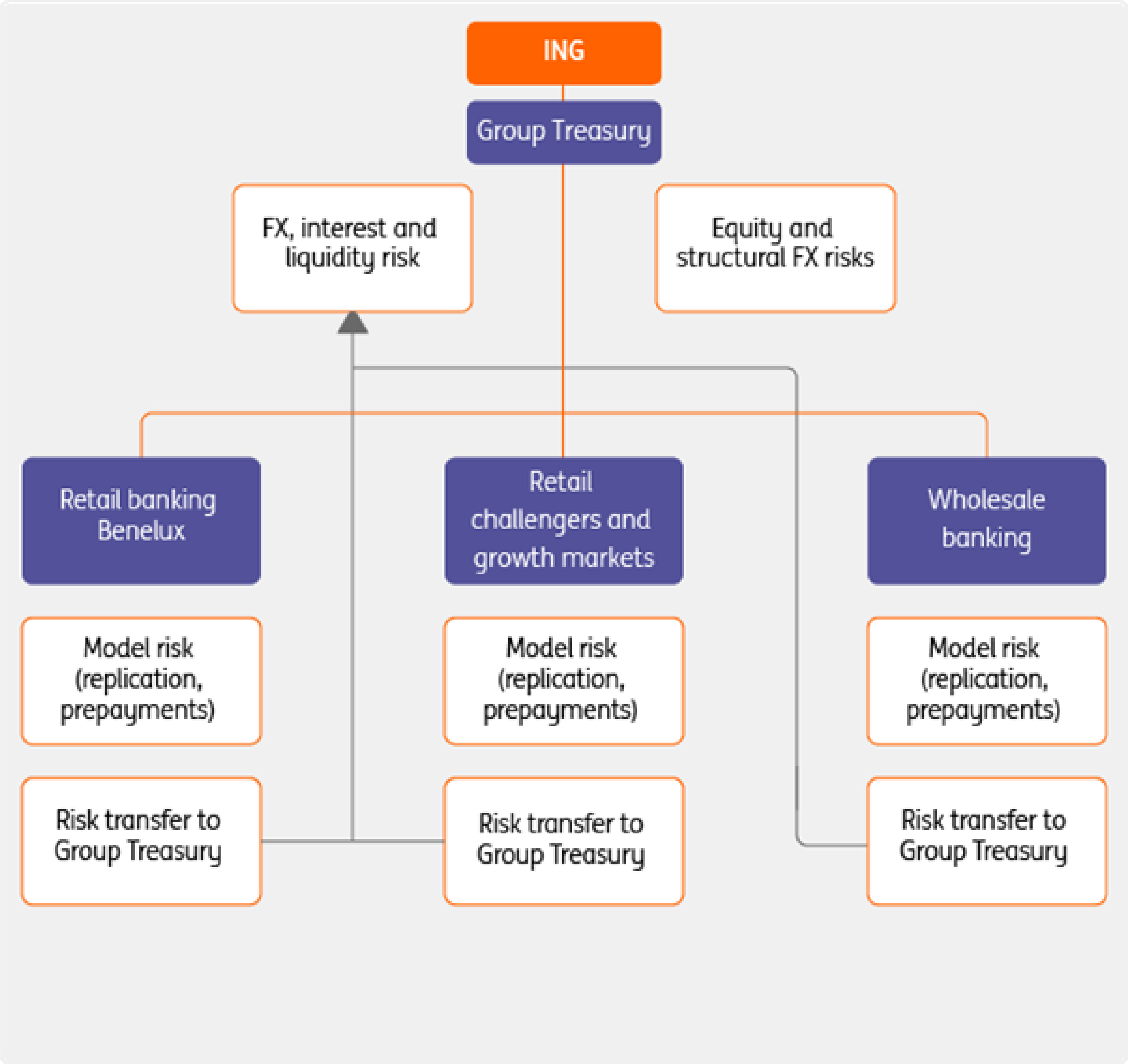
## Market risk in banking books

ING makes a distinction between the trading and banking (non-trading) books. Positions in banking books originate from the market risks inherent in commercial products that are sold to clients, Group Treasury exposures, and from the investment of our own funds (core capital). Both the commercial products and the products used to hedge market risk exposures in these products are intended to be held until maturity, or at least for the long-term.

### Risk transfer

An important element of the management of market risks in the banking book is the risk transfer process. In this process the interest rate, FX, funding and liquidity risks are transferred from the commercial books through matched funding to Group Treasury, where it is centrally managed. The scheme below presents the transfer and management process of market risks in the banking books:

**Risk transfer**



## Risk measurement

The main concepts and metrics used for measuring market risk in the banking book are described below per risk type.

## Interest rate risk in banking book

Interest rate risk in the banking book is defined as the exposure of a bank's earnings, capital, and market value to adverse movements in interest rates originated from positions in the banking book.

### Governance

The management of interest rate risk follows the Interest Rate Risk in the Banking Book (IRRBB) framework as approved by ALCO Bank. This framework describes roles, responsibilities, risk metrics, the policies and procedures related to interest rate risk management. Furthermore ALCO Bank sets the risk appetite for interest rate risk, which is then translated into limits for the interest rate risk metrics.

ING's approach to interest rate risk management, as set forth in this framework, is the centralisation of risks from commercial books (that capture the products sold to clients) to globally managed interest rate risk books. This enables a clear demarcation between commercial business results and results on unhedged interest rate positions.

ING distinguishes between three types of activities that generate interest rate risk in the banking book:

- Investment of own funds (by Group Treasury);
- Commercial business (e.g. Retail business); and
- The strategic interest rate position (Group Treasury).

Below the three activities are described in more detail:

Group Treasury is responsible for managing the investment of own funds (core capital), more information can be found in the Capital Management section. Capital is invested for longer periods to keep earnings stable.

The commercial activities can result in linear interest rate risk, for example, when re-pricing tenors of assets differ from those of liabilities. Also, interest rate risk can arise from customer behaviour depending on the nature of the underlying product characteristics. Customer behaviour risk is defined as the potential future value loss due to deviations in the actual behaviour of clients versus the modelled behaviour towards the embedded options in commercial products. General sources of customer behaviour risk include the state of the economy, competition, changes in regulation, legislation and tax regime, and developments in the housing market. Since these risk factors cannot be (fully) mitigated, ING holds capital to be able to absorb possible losses as a result of changed customer behaviour.

From an interest rate risk perspective, commercial activities can typically be divided into three main product types: savings and demand deposits, mortgages, and loans.

- Savings and demand deposits are generally invested with the goal to hedge their value and minimize the sensitivity of the margin to market interest rates. Interest rate risk can arise when there is a lag between savings rate adjustments and the adjustments experienced through market rates or when market rate changes cannot be passed on to clients. Interest rate risk is modelled based on the stability of the deposit and the pass through rate. This takes into account different elements, such as pricing strategies, volume developments and the level and shape of the yield curve. Savings volumes are typically assumed not to be sensitive to interest rate shocks;
- Interest rate risk for mortgages arises through prepayment behaviour. In modelling this risk, interest rate dependent pre-payments are considered. Next to the dependence on interest rates, modelled prepayment may include other effects such as loan to value, seasonality and the reset date of the loan. In addition, the interest sensitivity of embedded offered rate options is considered; and

- Wholesale Banking loans typically do not experience interest rate prepayment behavior as they are hedged from an interest rate risk perspective and therefore do not contain significant fixed rate convexity risk.

Customer behaviour in relation to mortgages, loans, savings and demand deposits is modelled, based on extensive research. Per business unit and product type, exposures are typically segmented into different portfolios based on expected client behaviour. For each of the segments, model parameters for example for the pass through rate and customer behaviour are determined based on historical data and expert opinion. Models are back tested and updated when deemed necessary. Model parameters and the resulting risk measures are approved by (local) ALCO.

Linear interest rate risk is transferred from the commercial business to the treasury book (Group Treasury), if necessary, using estimations of customer behaviour. The originating commercial business is ultimately responsible for estimating customer behaviour, leaving convexity risk and (unexpected) customer behaviour risk with the commercial business. Risk measurement and the risk transfer process take place on a monthly basis, but more often if deemed necessary, for instance in volatile markets.

The commercial business manages the convexity risk that is the result of products that contain embedded options, like mortgages. Here the convexity risk is defined as the optionality effects in the value due to interest rate changes, excluding the first-order effects. In some cases, convexity risk is transferred from the commercial books to treasury books using cap/floor contracts.

Group Treasury manages the strategic interest rate position including capital investments. The main objective is to maximise the economic value of the book and to generate adequate and stable annual earnings within the risk appetite boundaries set by ALCO Bank.

In the following sections, the interest rate risk exposures in the banking books are presented. ING uses risk measures based on both an earnings and a value perspective. Net Interest Income (NII)-at-Risk is used to provide the earnings perspective and the Net Present Value (NPV)-at-Risk and Basis Point Value (BPV) figures provide the value perspective. Please note that corrective management actions are not taken into account in these figures although price adjustments are included in the earnings risk measure.

During 2019, the following refinements to the risk measurement for Interest Rate Risk in the Banking Book were made:
- Review of the risk appetite for Interest Rate Risk for the Banking Book;
- Annual review of the interest rates scenarios used for calculating NII-a-Risk and NPV-at-Risk; and
- Savings model updates for market developments.

### Net Interest Income (NII) at Risk

NII-at-Risk measures the impact of changing interest rates on (before tax) net interest income of the banking book with a time horizon of one year. This excludes credit spread sensitivity and longer term earnings impact. The NII-at-Risk figures in the tables below reflect a parallel interest rate shock with a time horizon of one year. Next to parallel scenarios, IRRBB monitoring and management includes the impact of non-parallel scenarios and the impact over a longer horizon. The NII-at-Risk asymmetry between the downward and upward ramped scenarios (gradual shock ≈ +/-100bps) is primarily caused by the convexity risk in the mortgage and savings portfolio due to the embedded options and pricing constraints.

**NII-at-Risk banking books per business - year 1**

| | 2019 | | 2018 | |
|---|---|---|---|---|
| | Ramped, unfloored parallel ▼ | Ramped, unfloored parallel ▲ | Ramped, unfloored parallel ▼ | Ramped, unfloored parallel ▲ |
| **By business** | | | | |
| Wholesale Banking | –12 | 12 | –204 | 239 |
| Retail Banking Benelux | –91 | 40 | –49 | 22 |
| Retail Challengers & Growth Markets | –3 | –3 | 165 | –186 |
| Corporate Line Banking | –30 | 30 | –30 | 30 |
| **Total** | **–136** | **79** | **–119** | **106** |

The NII-at-Risk is mainly influenced by the sensitivity of savings to interest rate movements due to pass through rate differences between savings rates and investment yields, but is partially offset by the sensitivity of mortgages. The investment of own funds only impacts the earnings sensitivity marginally, as only a relatively small part has to be (re)invested within the 1-year horizon.

**NII-at-Risk banking book per currency - year 1**

| | 2019 | | 2018 | |
|---|---|---|---|---|
| | Ramped, unfloored | | Ramped, unfloored | |
| | parallel ▼ | parallel ▲ | parallel ▼ | parallel ▲ |
| **By currency** | | | | |
| Euro | -134 | 65 | -81 | 60 |
| US Dollar | 25 | -24 | 20 | -20 |
| Other | -27 | 39 | -57 | 65 |
| **Total** | **-136** | **79** | **-119** | **106** |

### Year-on-year variance analysis

The change in NII-at-Risk is mainly visible for Retail Banking Benelux and Retail Challengers & Growth Markets. This is driven by the savings model updates for market developments in ING Belgium, ING Germany, ING Netherlands, ING Spain and ING Poland. The annual update of the interest rate scenarios also led to a limited increase in the NII-a-Risk for year 1.

## Net Present Value (NPV) at Risk

NPV-at-Risk measures the impact of changing interest rates on value. The NPV-at-Risk is defined as the outcome of an instantaneous increase and decrease in interest rates from applying currency specific scenarios. The NPV-at-Risk asymmetry between the downward and upward shock is primarily caused by convexity risk in the mortgage and savings portfolio. The NPV-at-Risk figures are also calculated using the updated interest rate scenarios.

The full value impact cannot be directly linked to the financial position or profit or loss account, as fair value movements in banking books are not necessarily reported through the profit or loss account or through Other Comprehensive Income (OCI). The value mutations are expected to materialise over time in the profit and loss account if interest rates develop according to forward rates throughout the remaining maturity of the portfolio.

**NPV-at-Risk banking books per business line**

| | 2019 | | 2018 | |
|---|---|---|---|---|
| | unfloored | | unfloored | |
| | parallel ▼ | parallel ▲ | parallel ▼ | parallel ▲ |
| **By business** | | | | |
| Wholesale Banking | 182 | 400 | -55 | 134 |
| Retail Banking Benelux | –1,431 | 268 | –1,344 | -269 |
| Retail Challengers & Growth Markets | -259 | -452 | -521 | -54 |
| Corporate Line Banking | - | - | -38 | 35 |
| **Total** | **–1,508** | **216** | **–1,958** | **–153** |

The asymmetry between the NPV-at-Risk for a downward and an upward shock scenario is primarily caused by the convexity risk, which arises from (embedded) optionality in the savings and mortgage portfolio.

### Year-on-year variance analysis

The change in NPV-at-Risk for Retail Banking Benelux was driven by updates in the savings model to reflect the most recent market developments in The Netherlands and Belgium. The internal view on capital replication of the own funds long-term investments is included in the NPV-at-Risk figures. Only a mismatch from the target investment profile results in NPV-at-Risk.

### IBOR Transition

Interbank offered rates, such as Euribor and Libor, are widely used as benchmarks to set interest rates across a broad range of financial products and contracts. The financial markets are going through a significant reform and financial institutions are obligated to implement a replacement of these major interest rate reference rates. In line with recommendations from the Financial Stability Board, a fundamental review and reform of the major interest rates benchmarks has been undertaken. For the Eurozone, this led to a reform of the EURIBOR benchmark rate and development of €STR as the recommended new nearly risk free rate to replace EONIA. For LIBOR benchmarks the reform will include replacing interest rate benchmarks with alternative, nearly risk-free rates. This process is at different stages, and is progressing at different speeds, across several major currencies.

ING is currently making the necessary preparations for the potential cessation and transition of IBORs in the years to come, where we take 2022 as the potential first date that this could materialise. Due to the many uncertainties the overall IBOR transition still faces, at this stage the potential impact of this major event on ING's credit risk profile, business model and funding profiles is not entirely clear. We would like to underline however that ING is aware of the significant impact of this transition and is therefore putting all efforts into making sure that it is properly prepared for this transition in a timely manner. For this purpose, ING has established a global program across all areas of the bank to coordinate ING's transition activities and to assess the potential risks and impacts of any transition. It is a multi-year global program that encompasses various workstreams and departments including the client facing teams, Legal, Finance, Operations and IT.
The following interest rate benchmarks are in scope of ING's IBOR transition program: GBP LIBOR, USD LIBOR, EUR LIBOR, EURIBOR, EONIA, CHF LIBOR and JPY LIBOR.

ING is pro-actively reaching out to industry participants, counterparties and clients to create awareness and support on the upcoming transition.

Given that IBOR reform may have various accounting implications, the International Accounting Standards Board (IASB) has commenced a two phase project. Phase 1 addresses those issues that affect financial reporting before the replacement of an existing benchmark and Phase 2 focuses on issues that may affect financial reporting when the existing benchmark rate is reformed or replaced. In 2019, ING early adopted the amendments to IFRS issued by the IASB as part of Phase 1 (refer to section 1.6.5 of Note 1 of the financial statements). Refer to Note 39 'Derivatives and hedge accounting' for the disclosure requirements relating to the application of the amendments as part of Phase 1. Phase 2 of the project is still ongoing and focuses on, amongst others, accounting for changes to contracts due to the IBOR reform and impact on hedge accounting. ING continues to monitor the progress of Phase 2 of the project and will assess the impact as more information becomes available.

## Foreign exchange (FX) risk in banking books

FX exposures in banking books result from core banking business activities (business units doing business in currencies other than their base currency), foreign currency investments in subsidiaries (including realised net profit and loss), and strategic equity stakes in foreign currencies. The policy regarding these exposures is briefly explained below.

### Governance – Core banking business

Every business unit hedges the FX risk resulting from core banking business activities into its base currency. Consequently, assets and liabilities are matched in terms of currency.

### Governance – FX translation result

ING's strategy is to keep the target CET1 ratio within a certain range when FX rates fluctuate, whilst limiting the volatility in the profit and loss account. Therefore, hedge accounting is applied to the largest extent possible. Taking this into account, the CET1 ratio hedge can be achieved by deliberately taking foreign currency positions equal to certain target positions, such that the target CET1 capital and risk-weighted assets are equally sensitive in relative terms to changing FX rates. For a selection of emerging market currencies ING decided not to enter into foreign currency hedges as allowed under the policy.

## Risk profile – FX translation result

The following table presents the currency exposures in the banking books for the most important currencies for the FX translation result. Positive figures indicate long positions in the respective currency. As a result of the strategy to hedge the CET1 ratio a net foreign currency exposure exists.

In order to measure the sensitivity of the target CET1 ratio against FX rate fluctuations, the Historical Value at Risk is used based on historical series of last year's FX rates. It measures the drop in the CET1 ratio from the target based on historical FX rates. Based on these time series and with a probability of 10%, the drop in the CET1 ratio would be 0.09%.

**Net banking currency exposures banking books**

| | Foreign Investments | | Hedges | | Net exposures | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| US Dollar | **8,031** | 5,794 | **–11** | –1 | **8,020** | 5,793 |
| Pound Sterling | **–22** | 614 | | | **–22** | 614 |
| Polish Zloty | **2,522** | 2,563 | **–278** | –526 | **2,244** | 2,036 |
| Australian Dollar | **3,565** | 3,569 | **–2,033** | –2,398 | **1,532** | 1,171 |
| Turkish Lira | **1,337** | 1,219 | | | **1,337** | 1,219 |
| Chinese Yuan | **2,255** | 2,208 | | | **2,255** | 2,208 |
| Indian Rupee | | 917 | | | | 917 |
| Russian Rouble | **540** | 460 | **–85** | –101 | **455** | 359 |
| Other currency | **4,742** | 4,462 | **–1,834** | –2,057 | **2,907** | 2,405 |
| **Total** | **22,969** | 21,806 | **–4,242** | –5,084 | **18,727** | 16,722 |

The USD net exposure increased due to optimization of the capitalization and funding of the NY entity. In 2019, we reviewed and updated our methodology for specific CET1 deductibles. This drives the move in GBP net exposure and applies to the calculation of the FX Translation figures in the above table hence has no impact on the reported CET1 figure itself. ING sold its stake in Kotak Mahindra in February 2019 and therefore no longer has exposure on Indian Rupee.

## Equity price risk in banking books

### Governance

ING maintains a strategic portfolio with substantial equity exposure in its banking books. Local offices are responsible for the management of the equity investment positions. Financial Risk is responsible for monitoring the regulatory capital for equity investments on a monthly basis and acts independently from ING's Local management when monitoring these positions.

### Risk Profile

Equity price risk arises from the possibility that an equity security's price will fluctuate, affecting the value of the equity security itself as well as other instruments whose value react similarly to the particular security, a defined basket of securities, or a securities index. ING's equity exposure mainly consists of the investments in associates and joint ventures of EUR 1,790 million (2018: EUR 1,203 million) and equity securities held at fair value through other comprehensive income (FVOCI) of EUR 2,306 million (2018: EUR 3,228 million). The value of equity securities held at FVOCI is directly linked to equity security prices with increases/decreases being recognized in the revaluation reserve. Investments in associates and joint ventures are measured in accordance with the equity method of accounting and the balance sheet value is therefore not directly linked to equity security prices.

### Year-on-year variance analysis

The revaluation reserve relating to equity securities at FVOCI moved from EUR 1,914 million per year end 2018 to EUR 1,580 million per year end 2019. In 2019, the securities at FVOCI decreased by EUR 334 million following the full disposal of Kotak in the same year.

**Revaluation reserve equity securities at fair value through other comprehensive income**

| | 2019 | 2018 |
|---|---|---|
| Positive re-measurement | 1,582 | 1,923 |
| Negative re-measurement | –2 | –8 |
| **Total** | **1,580** | **1,914** |

### Real Estate price risk in banking books

Real Estate price risk arises from the possibility that Real Estate prices fluctuate. This affects both the value of Real Estate assets and the earnings related to Real Estate activities.

#### Governance

Real Estate is a run-off business consisting of Real Estate Development and Real Estate Investment Management activities which are being wound down by sale of assets, strict execution of contract maturity, or through portfolio sales.

## Market risk in trading books

Within the trading portfolios, positions are maintained in the financial markets. These positions are often a result of transactions with clients and may benefit from short-term price movements. In 2019, ING continued its strategy of undertaking trading activities to develop its client-driven franchise and deliver a differentiating experience by offering multiple market and trading products.

### Governance

The Financial Markets Risk Committee (FMRC) is the market risk committee that, within the risk appetite set by ALCO Bank, sets market risk limits both on an aggregated level and on a desk level, and approves new products. FI-FM Risk advises both FMRC and ALCO Bank on the market risk appetite of trading activities.

With respect to the trading portfolios, FI-FM Risk focuses on the management of market risks of Wholesale Banking (mainly Financial Markets) as this is the only business line within ING where trading activities take place. Trading activities include facilitation of client business and market making. FI-FM Risk is responsible for the development and implementation of trading risk policies and risk measurement methodologies, and for reporting and monitoring risk exposures against approved trading limits. FI-FM Risk also reviews trading mandates and limits, and performs the gatekeeper role in the product review process. The management of market risk in trading portfolios is performed at various organisational levels. The FI-FM Risk Management Framework defines policies and procedures for the overall management of trading books. Trading activity is systematically reviewed and positions against the mandates are assessed jointly by the first and second lines of defence.

### Risk measurement

ING uses a comprehensive set of methodologies and techniques to measure market risk in trading books: Value at Risk (VaR) and Stressed Value at Risk (SVaR), Incremental Risk Charge (IRC), and Event Risk (stress testing). Systematic validation processes are in place to validate the accuracy and internal consistency of data and parameters used for the internal models and modelling processes.

#### Value at Risk

FI-FM Risk uses the historical simulation VaR methodology (Hvar) as its primary risk measure. The HVaR for market risk quantifies, with a one-sided confidence level of 99%, the maximum overnight loss that could occur in the trading portfolio of ING due to changes in risk factors (e.g. interest rates, equity prices, foreign exchange rates, credit spreads, implied volatilities) if positions remain unchanged for a time period of one day. Next to general market movements in these risk factors, HVaR also takes into account market data movements for specific moves in e.g. the underlying issuer of securities. A single model that diversifies general and specific risk is used. In general, a full revaluation approach is applied, and for a limited number of linear trading positions and risk factors in commodity and equity risk classes a sensitivity-based approach is applied. The potential impact of historical market movements on today's portfolio is estimated, based on equally weighted observed market movements of the previous year (260 days). When simulating potential movements in risk factors, depending on the risk factor type, either an absolute or a relative shift is used. The data used in the computations is updated daily. ING uses HVaR with a one-day horizon for internal risk measurement, management control, and backtesting, and HVaR with a ten-day horizon for determining regulatory capital. To compute HVaR with a ten-day horizon the one day risk factor shifts are scaled by the square root of ten and then used as an input for the revaluation. The same model is used for all legal entities within ING with market risk exposure in the trading portfolio.

### Limitations

HVaR has some limitations: HVaR uses historical data to forecast future price behaviour, but future price behaviour could differ substantially from past behaviour. Moreover, the use of a one-day holding period (or ten days for regulatory capital calculations) assumes that all positions in the portfolio can be liquidated or hedged in one day. In periods of illiquidity or market events, this assumption may not hold. Also, the use of a 99% confidence level means that HVaR does not take into account any losses that occur beyond this confidence level.

### Backtesting

Backtesting is a technique for the ongoing monitoring of the plausibility of the HVaR model in use. Although HVaR models estimate potential future trading results, estimates are based on historical market data. In a backtest, the actual daily trading result (excluding fees and commissions) is compared with the one-day HVaR. In addition to using actual results for backtesting, ING also uses hypothetical results, which exclude the effects of intraday trading, fees, and commissions. When an actual or a hypothetical loss exceeds the HVaR, an 'outlier' occurs. Based on ING's one-sided confidence level of 99%, an outlier is expected once in every 100 business days. In 2019, there were five actual outliers i.e. occurrences of actual loss and four hypothetical outliers i.e. occurrences of hypothetical loss, when the daily trading loss exceeded the daily consolidated HVaR of ING. The outliers were driven by interest rates market moves mainly related to quantitative easing. ING reports the backtesting results on a quarterly basis to the ECB.

## Stressed HVaR

The Stressed HVaR (SVaR) is intended to replicate the HVaR calculation that would be generated on the bank's current portfolio with inputs calibrated to the historical data from a continuous 12-month period of significant financial stress relevant to the bank's portfolio. To calculate SVaR, ING uses the same model that is used for 1DHVaR, with a ten-day horizon. The data for historical stress period used currently includes the height of the credit crisis around the fall of Lehman Brothers, and this choice is reviewed regularly. The historical data period is chosen so that it gives the worst scenario loss estimates for the current portfolio. The same SVaR model is used for management purposes and for regulatory purposes. The same SVaR model is used for all legal entities within ING with market risk exposure in the trading portfolio.

## Incremental Risk Charge

The IRC for ING is an estimate of the default and migration risks for unsecuritised credit products in the trading book, over a one-year capital horizon, with a 99.9% confidence level. The same IRC model is used for all legal entities within ING with market risk exposure in the trading portfolio. Unsecuritised trading positions of ING, which are subject to specific interest rate risk included in the internal model approach for market risk regulatory capital, are in scope of the IRC model. By model choice, equity is excluded from the model. For the calculation of IRC, ING performs a Monte-Carlo simulation based on a Gaussian copula model. The asset correlations used in the Gaussian copula model are determined using the IRB correlation formula. The rating change is simulated for all issuers over the different liquidity horizons (i.e. time required to liquidate the position or hedge all significant risks) within one year. Movements across different rating categories and probabilities of default are governed by a credit-rating transition matrix. An external transition matrix is obtained from Standard & Poor's (S&P). The financial impact is then determined for the simulated migration to default, or for the simulated migration to a different rating category, based on LGD or credit spread changes, respectively.

The liquidity horizon has been set to the regulatory minimum of three months for all positions in scope. ING reviews the liquidity horizons regularly based on a structured assessment of the time it takes to liquidate the positions in the trading portfolio.

ING periodically assesses the compliance of the IRC model with regulatory requirements by performing gap analyses, substantiating the modelling choices, and quantifying the impact of alternative approaches.

### Stress Testing and Event Risk

Stress Testing and Event Risk are valuable risk management tools. In addition to the bank-wide stress test framework as described in the stress testing section, FI-FM Risk performs structured stressed scenario tests under the Event Risk framework to monitor market risks under extreme market conditions. Event Risk is calculated because HVaR in general does not produce an estimate of the potential losses that can occur as a result of extreme market movements, i.e. beyond the confidence level. Event Risk evaluates the bank's financial stability under severe but plausible stress scenarios and assists in decision-making aimed at maintaining a financially healthy going-concern institution after a severe event occurs. Event Risk is based on historical as well as hypothetical extreme scenarios. The result is an estimate of the profit and loss caused by a potential event and its world-wide impact for ING. The Event Risk number for ING trading activity is generated on a weekly basis. Like for HVaR, risk appetite for Event Risk is limited by ALCO Bank.

ING's Event Risk policy is based on a large set of possible stress scenarios per risk type. In stress scenarios, shocks are applied to prices (credit spreads, interest rates, equity, commodities, and fx rates) and volatilities. Depending on the type of the stress test, additional scenario assumptions can be made, for example on correlations, dividends, or recovery rates. For example, for equity products both a crisis scenario (prices decrease) as well as a bull scenario (prices increase) are assumed. Scenarios are calculated based on events happening independently, jointly by region, or in all countries simultaneously. This way, for each risk type, a large set of scenarios is calculated. The worst scenarios per market are combined across markets by assessing both independent events per market, and the worst events happening in all markets at the same time.

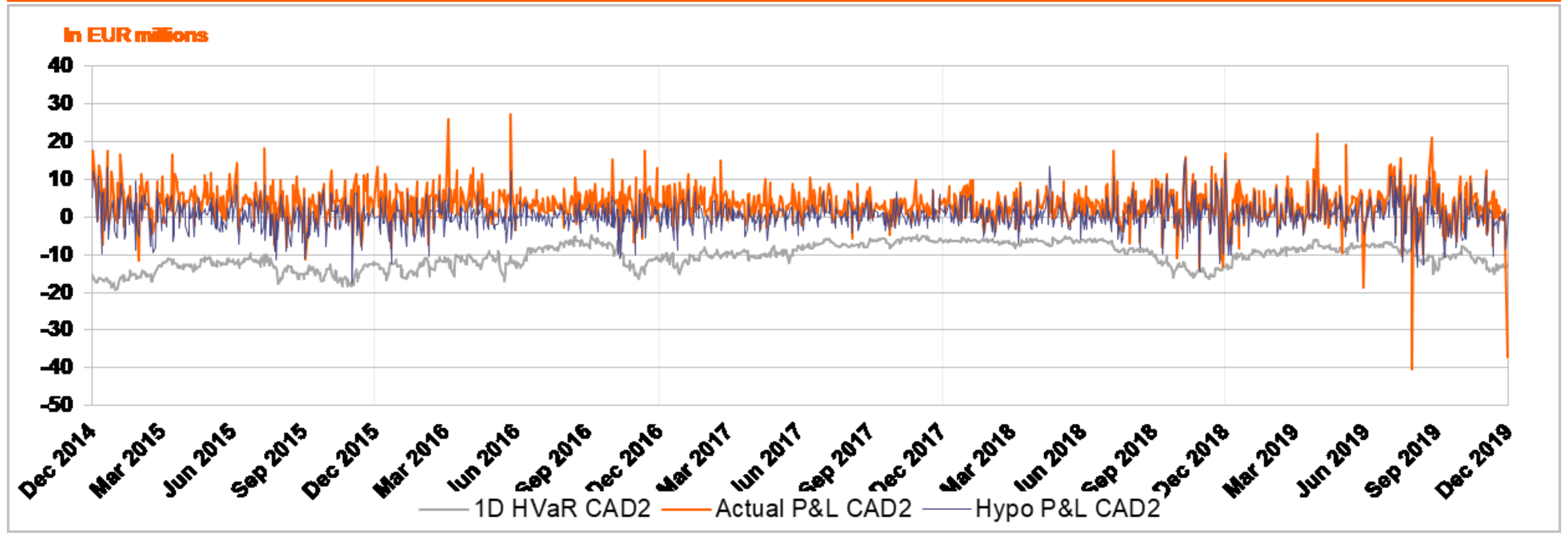
### Other trading controls

HVaR and Event Risk limits are the most important limits to control the trading portfolios. Additionally, limits have been set on SVaR and IRC. Furthermore, ING uses a variety of other controls to supplement these limits. Position and sensitivity limits are used to prevent large concentrations in specific issuers, sectors, or countries. Moreover, other risk limits are set with respect to the activities in complex derivatives trading. The market risk of these products is controlled by product specific limits and constraints.

### Risk profile

The following chart shows the development of the overnight HVaR under a 99% confidence level and a one-day horizon versus actual and hypothetical daily trading profits and losses. In calculation of the hypothetical daily profit and loss, the trading position is kept constant and only the market movement is taken into account. The overnight HVaR is presented for the ING trading portfolio from 2014 to 2019.

**EU MR4: Consolidated trading HVaR[1]**




1 CVA risk is not included in VaR.

The risk figures in the backtesting graph above and in the table below relate to all trading books for which the internal model approach is applied, i.e. all trading books, including Credit Exposure Management books.

**1d VaR for Internal Model Approach trading portfolios[3]**

| | Minimum | | Maximum | | Average | | Year end | |
|---|---|---|---|---|---|---|---|---|
| amounts in millions of euros | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Interest rate [1] | 3 | 3 | 13 | 7 | 6 | 5 | 12 | 4 |
| Equity and commodity | 1 | 1 | 7 | 10 | 2 | 3 | 1 | 7 |
| Foreign exchange | 1 | 1 | 11 | 10 | 2 | 4 | 1 | 9 |
| Credit spread | 4 | 3 | 7 | 6 | 6 | 4 | 5 | 6 |
| Diversification [2] | | | | | –6 | –8 | –6 | –13 |
| **Total VaR** | **6** | **5** | **15** | **16** | **10** | **9** | **13** | **13** |

1 For calculation of HVaR per risk class the full valuation is performed according to HVaR methodology using a set of scenario changes for the risk factors for the particular risk class, while risk factors for all other risk classes are kept unchanged.
2 The total HVaR for the columns Minimum and Maximum cannot be calculated by taking the sum of the individual components since the minimum/maximum observations for both the individual markets as well as for total HVaR may occur on different dates. Therefore, diversification is not calculated for the minimum and maximum categories.
3 CVA risk is not included in VaR.

Average 1D/10D HVaR, 10D SVaR and IRC over 2019 are in line with the average over 2018. The average for foreign exchange decreased compared to 2018 while credit spread increased compared to 2018, both driven by portfolio changes. The VaR at the period end of 2019 and 2018 was EUR 13 million, however the asset class decomposition changed significantly. The risk moved from foreign exchange and equity and commodity towards interest rate asset class.

**EU MR3: Internal Model Approach values for trading portfolios**

| amounts in millions of euros | | 2019 | 2018 |
|---|---|---|---|
| **VaR (10 day 99%)** | | | |
| 1 | Maximum value | 42 | 46 |
| 2 | Average value | 27 | 25 |
| 3 | Minimum value | 16 | 15 |
| 4 | Period end | 33 | 40 |
| **Stressed VaR (10 day 99%)** | | | |
| 5 | Maximum value | 126 | 139 |
| 6 | Average value | 72 | 73 |
| 7 | Minimum value | 47 | 41 |
| 8 | Period end | 76 | 124 |
| **Incremental Risk Charge (99.9%)** | | | |
| 9 | Maximum value | 169 | 107 |
| 10 | Average value | 76 | 62 |
| 11 | Minimum value | 42 | 40 |
| 12 | Period end | 64 | 58 |
| **Comprehensive Risk capital charge (99.9%)** | | | |
| 13 | Maximum value | n/a | n/a |
| 14 | Average value | n/a | n/a |
| 15 | Minimum value | n/a | n/a |
| 16 | Period end | n/a | n/a |

## Regulatory Capital

According to the Capital Requirements Regulation (CRR/CRD IV), regulatory capital (own funds requirements) for market risk can be calculated using the standardised approach or an internal model approach. ING received regulatory approval to use an internal model to determine the regulatory capital for the market risk in all trading books of ING. Market risk capital of trading books is calculated according to the CRR, using internal HVaR, SVaR, and IRC models, where diversification is taken into account. Capital for foreign exchange risk from the banking books and for Collective Investment Undertakings (CIUs) exposures in trading books are calculated using Standardised

Approach with fixed risk weights. ING does not have a correlation trading portfolio or any other securitisations in the trading book.

## Standardised Approach

**EU MR1: Market risk under Standardised Approach**

| | | 2019 | | 2018 | |
|---|---|---|---|---|---|
| amounts in EUR millions | | RWA | Capital requirements | RWA | Capital requirements |
| **Outright products** | | | | | |
| 1 | Interest rate risk (general and specific) | 14 | 1 | | |
| 2 | Equity risk (general and specific) | | | | |
| 3 | Foreign exchange risk | | | 1,131 | 90 |
| 4 | Commodity risk | | | | |
| **Options** | | | | | |
| 5 | Simplified approach | | | | |
| 6 | Delta-plus method | | | | |
| 7 | Scenario approach | | | | |
| 8 | Securitization (specific risk) | | | | |
| 9 | **Total** | 14 | 1 | 1,131 | 90 |

The MRWA under Standardised Approach decreased significantly compared to 4Q2018. At the beginning of 2019 an important FX position in the banking book was closed causing the FX exposure to decrease below the 2% own funds threshold. According to Art. 351 CRR, in such a case, the calculation of Market Risk regulatory capital is not required. As of 3Q2019, CIU exposures in trading books are capitalised in Market risk under Standardised Approach under interest rate specific risk and foreign exchange risk categories.

## Internal Model Approach

Market risk Regulatory Capital increased during the 2019 compared to 2018. The increase is driven by an increase in IRC, while VaR and SVaR slightly decreased. IRC capital increased as a result of changes in the portfolio in combination with credit spread movements.

**EU MR2-A: Market risk under Internal Model Approach**

| | | 2019 | | 2018 | |
|---|---|---|---|---|---|
| amounts in EUR millions | | RWA | Capital requirements | RWA | Capital requirements |
| 1 | **VaR (higher of values a and b)** | **1,261** | **101** | **1,394** | **112** |
| (a) | Previous day's VaR (Article 365(1) (VaRt-1)) | 404 | 32 | 529 | 42 |
| (b) | Average of the daily VaR (Article 365(1)) on each of the preceding sixty business days (VaRavg) x multiplication factor ((mc) in accordance with Article 366) | 1,261 | 101 | 1,394 | 112 |
| 2 | **SVaR (higher of values a and b)** | **3,011** | **241** | **3,217** | **257** |
| (a) | Latest SVaR (Article 365(2) (sVaRt-1)) | 902 | 72 | 1,486 | 119 |
| (b) | Average of the SVaR (Article 365(2) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366) | 3,011 | 241 | 3,217 | 257 |
| 3 | **Incremental risk charge -IRC (higher of values a and b)** | **1,278** | **102** | **767** | **61** |
| (a) | Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371) | 799 | 64 | 727 | 58 |
| (b) | Average of the IRC number over the preceding 12 weeks | 1,278 | 102 | 767 | 61 |
| 4 | **Comprehensive Risk Measure – CRM** (higher of values a, b and c) | | | | |
| (a) | Most recent risk number for the correlation trading portfolio (article 377) | | | | |
| (b) | Average of the risk number for the correlation trading portfolio over the preceding 12-weeks | | | | |
| (c) | 8 % of the own funds requirement in SA on most recent risk number for the correlation trading portfolio (Article 338(4)) | | | | |
| 5 | **Total** | **5,550** | **444** | **5,378** | **430** |

## Sensitivities

As part of the risk monitoring framework, FI-FM Risk actively monitors the daily changes of sensitivities of the trading portfolios. Sensitivities measure the impact of movements in individual market risk factors (foreign exchange rates, interest rates, credit spreads, equity, and commodity prices) on profit and loss results of the trading positions and portfolios.

The following tables show the five largest trading positions in terms of sensitivities to foreign exchange, interest rate and credit spread risk factor movements. These largest exposures also reflect concentrations of risk in FX risk per currency, IR risk per currency, and Credit Spread risk per country and rating and sector. Due to the nature of the trading portfolios, positions in the portfolios can change significantly from day to day, and sensitivities of the portfolios can change daily accordingly.

**Most important foreign exchange year-end trading positions**

| amounts in EUR millions | 2019 | | 2018 |
|---|---|---|---|
| Foreign exchange | | Foreign exchange | |
| US Dollar | 116 | US Dollar | –957 |
| Chinese Yuan Renminbi | –21 | Chinese Yuan Renminbi | –18 |
| South Korean Won | 20 | Swiss Franc | –14 |
| Brazilian Real | –15 | Polish Zloty | 14 |
| Japanese Yen | –10 | South Korean Won | 14 |

**Most important interest rate and credit spread sensitivities at year-end**

| amounts in EUR thousands | 2019 | | 2018 |
|---|---|---|---|
| **Interest Rate (BPV)** [1] | | **Interest Rate (BPV)** [1] | |
| Euro | –740 | Euro | –214 |
| US Dollar | –325 | US Dollar | 189 |
| Russian Ruble | –105 | Great-Britain Pound | –112 |
| Great-Britain Pound | –68 | Taiwan New Dollar | 96 |
| Australian Dollar | –31 | Polish Zloty | 54 |
| | | | |
| **Credit Spread (CSO1)** [2] | | **Credit Spread (CSO1)** [2] | |
| United States | 360 | Germany | 345 |
| Germany | 163 | United States | 330 |
| France | 117 | Russian Federation | 177 |
| Russian Federation | 73 | Netherlands | 164 |
| United Kingdom | 72 | France | 151 |

1 Basis Point Value (BPV) measures the impact on value of a portfolio due to a 1 basis point increase in interest rates. The figures include commodity risk in banking books.
2 Credit Spread Sensitivity (CS01) measures the impact on value of a portfolio due to a 1 basis point increase in credit spreads. Exposures to supranational institutions are not assigned to a specific country.

**Credit spread sensitivities per risk class and sector at year-end**

| amounts in EUR thousands | 2019 Corporate | 2019 Financial Institutions | 2018 Corporate | 2018 Financial Institutions |
|---|---|---|---|---|
| **Credit Spread (CSO1)** [1] | | | | |
| **Risk classes** | | | | |
| 1 (AAA) | 1 | –1 | –6 | 90 |
| 2–4 (AA) | –15 | –63 | 3 | –24 |
| 5–7 (A) | 143 | 32 | 117 | 78 |
| 8–10 (BBB) | 273 | 1 | 245 | –2 |
| 11–13 (BB) | 148 | 9 | 85 | 6 |
| 14–16 (B) | 51 | 1 | 37 | 13 |
| 17–22 (CCC and NPL) | 26 | – | 18 | |
| Not rated | – | – | 1 | |
| **Total** | **626** | **–21** | **500** | **161** |

1 Credit Spread Sensitivity (CS01) measures the impact on value of a 1 basis point increase in credit spreads.

# Funding and liquidity risk

## Introduction

Funding and liquidity (F&L) risk is the risk that ING Group or one of its subsidiaries cannot meet its financial liabilities when they are due at reasonable cost and in a timely manner. ING incorporates funding and liquidity management in its business strategy and applies a funding and liquidity risk framework in order to manage such risks within pre-defined boundaries.

A high-level overview of the F&L framework is provided in the next figure.

## Governance

Funding & liquidity risk management within ING falls under the supervision of the ALCO Bank function which approves the funding and liquidity risk appetite that is subsequently cascaded throughout the organisation. In addition, ALCO Bank has delegated responsibilities concerning the ICLAAP processes and documents as per the ICLAAP Framework of ING Group towards the Internal Capital & Liquidity Adequacy Assessment Process (ICLAAP) Committee. Therefore, it focuses on technical liquidity documents and oversees business processes and deliverables concerning ILAAP. The EB and MBB, staff departments from the CRO and CFO domain as well as Group Treasury have oversight of and are responsible for managing funding and liquidity risk.

ING's liquidity risk framework is based on the three lines of defence concept whereby risk principles are implemented, monitored and controlled in conjunction with both first and second line of defence functions.

Group Treasury and the business lines are the first line of defence functions. Group Treasury's main responsibility is to manage ING's (regulatory) liquidity and funding position by executing ING's funding plan, maintaining access to both the short and the long term professional funding markets

## Funding and liquidity framework

and managing the liquidity buffer. Business lines are responsible for managing the funding and liquidity positions from the originated business. A large part of this is replicated with Group Treasury.

The second line of defence Financial Risk function is responsible for developing and maintaining ING's policies, standards and guidelines on F&L risk management as well as for setting the F&L risk appetite. Furthermore, the Financial Risk function measures funding & liquidity risks, executes stress testing, provides management information and controls the liquidity and funding requirements on commercial products. The Finance function is responsible for management and regulatory reporting related to funding and liquidity risk management.

## Funding and liquidity management strategy and objectives

The main objective of ING's funding and liquidity risk management is to maintain sufficient liquidity to fund the commercial activities of ING both in normal and stressed market circumstances across various geographies, currencies and tenors. This requires a diversified funding structure considering relevant opportunities and constraints.

ING's funding consists mainly of retail and corporate deposits contributing 51% and 21% of the total funding respectively. These funding sources provide a relatively stable funding base. The remainder of the required funding is attracted primarily through a combination of long-term and short-term professional funding. Group Treasury manages the professional funding in line with the F&L risk appetite to ensure a sufficiently diversified and stable funding base.

**ING Group Funding Mix[1]**

| | 2019 | 2018 |
|---|---|---|
| **Funding type** | | |
| Customer deposits (retail) | **51%** | 50% |
| Customer deposits (corporate) | **21%** | 21% |
| Interbank | **5%** | 5% |
| Lending/repurchase agreement | **5%** | 7% |
| CD/CP | **5%** | 6% |
| Long-term debt | **11%** | 11% |
| Subordinated debt | **2%** | 2% |
| **Total** | **100%** | 100% |

1 Liabilities excluding trading securities and IFRS equity

The Loan-to-deposit ratio remained stable at the level of 1.06.

ING's long-term professional funding is well diversified across maturities and currencies. The main part of it is EUR and USD denominated which is in line with the currency composition of customer lending.

**ING Group long-term debt maturity profile by currency[1]**

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Beyond 2025 | Total |
|---|---|---|---|---|---|---|---|---|
| **Currency** | | | | | | | | |
| EUR | 9 | 9 | 8 | 5 | 1 | 4 | 26 | **62** |
| USD | 3 | 2 | 4 | 4 | 1 | - | 8 | **22** |
| Other | 1 | 2 | 1 | 1 | 1 | - | 2 | **10** |
| **Total** | **13** | **14** | **13** | **10** | **3** | **4** | **37** | **94** |

1 Nominal amounts in EUR billion.

## Funding and liquidity adequacy and risk appetite

ING distinguishes several key drivers of future liquidity and funding needs:

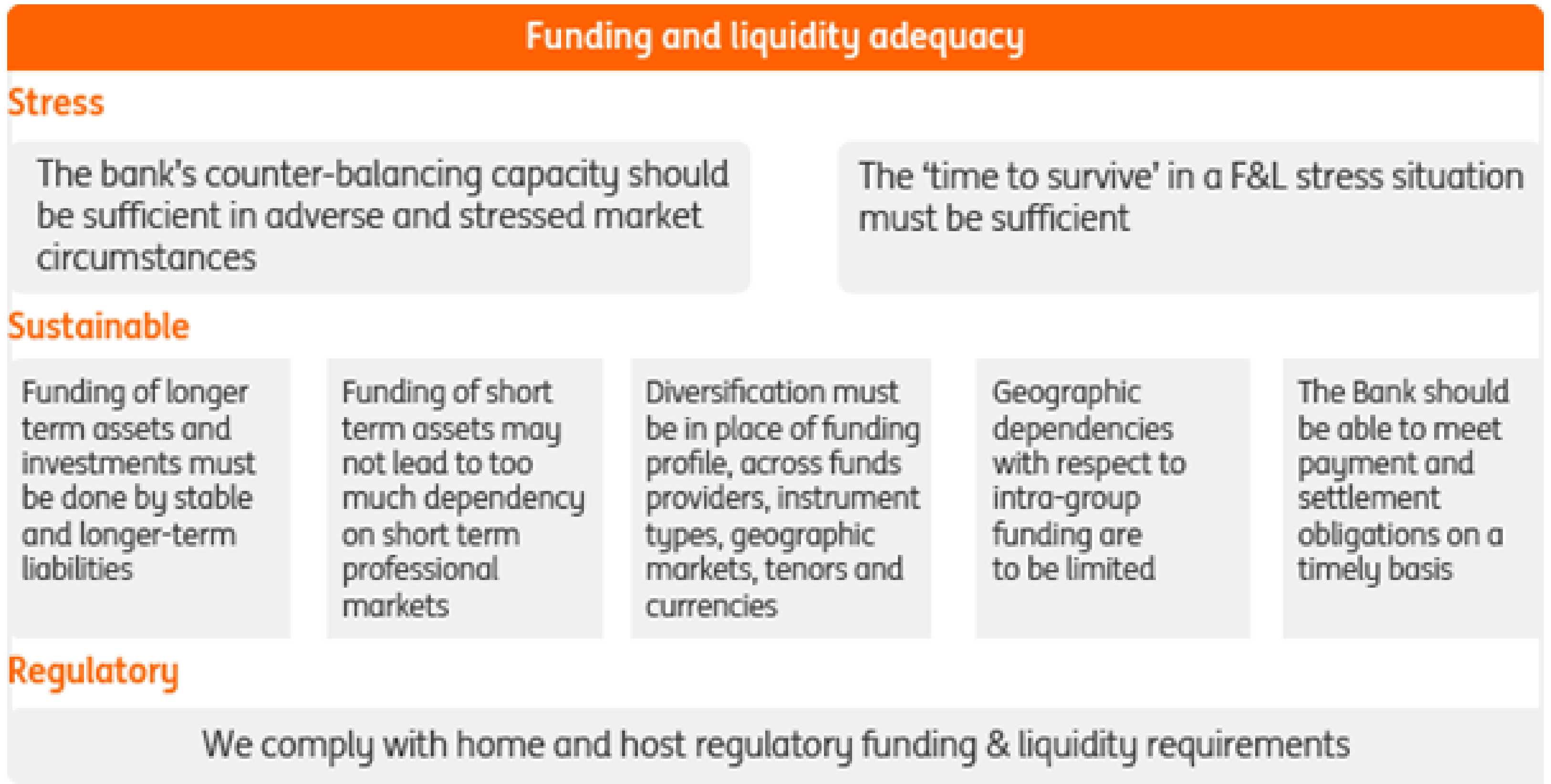
- Refinancing needs resulting from maturing debt and asset growth;
- Current and future regulatory requirements;
- Risk appetite statements set by ING's funding and liquidity risk function;
- The outcomes of various stress tests;
- Ability to distribute and transfer liquidity.

Taking into consideration the abovementioned factors, ING Group assesses its current and future liquidity adequacy and, if deemed necessary, takes steps to further improve ING's liquidity position and to ensure sufficient counterbalancing capacity. That is achieved through the quarterly update of the Liquidity adequacy statement and the execution of the ILAAP process.

ING's Funding and Liquidity framework aims to ensure sufficient liquidity under normal, adverse and stressed market circumstances. ING assesses its F&L adequacy through three lenses: (i) Stress, (ii) Sustainability and (iii) Regulatory.

(i) Through the Stress lens ING evaluates its ability to withstand a period of prolonged F&L stress (idiosyncratic, market-wide or a combination of the two) which is characterised by customer deposit outflows and/or deterioration of funding markets access;
ii) Through the Sustainability lens ING assesses the extent to which its customers, professional counterparties and investors are comfortable extending funding in tenors, currencies and instruments necessary to sustainably fund ING under a going-concern situation;
(iii) Through the Regulatory lens ING ascertains that it is in a position to meet both current and future regulatory requirements.

For each lens, ING has established a related set of risk appetite statements which define ING's risk appetite commensurate with the principles of liquidity adequacy. These risk appetite statements are summarised in the next graph.




The F&L risk appetite statements are translated into a number of metrics with appropriate boundaries and instruments which are used to measure and manage ING's funding and liquidity risk.

The risk appetite with respect to the stress lens is set to ensure there is sufficient counterbalancing capacity under various internally defined stress scenarios. Regarding the sustainability perspective, an internally defined Stable funding to loans (SFL) ratio (supplemented by other metrics) is used to ensure a diversified funding base and to prevent overreliance on professional funding. Finally, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) regulatory metrics are monitored in terms of both ING's risk appetite and regulatory requirements.

The LCR compares the volume of available high quality liquid assets (HQLA) to net outflows (outflows- inflows) over a 30-day stress scenario defined by the regulator. ING's liquidity buffer is part of the counterbalancing capacity which serves as a liquidity cushion under normal and stressed conditions.

The liquidity buffer consists mainly of Level 1 assets which are represented by government and central bank assets and are of the highest liquidity quality. Only assets that are freely available (not pledged under existing contracts) for liquidity purposes are included in the buffer. The size and composition of the Liquidity buffer are driven by ING's risk appetite as well as by regulatory requirements.

The macroeconomic and market environment are also important considerations in ING's funding and liquidity framework.
The macroeconomic environment comprises various exogenous factors over which ING has no control but which may have a material impact on ING's F&L position. The main macroeconomic factors analysed on a regular basis include:
- Global and local economic performance: e.g. shifts in GDP, inflation rate, unemployment rates and public deficit/surplus;
- Changing geopolitical trends;
- Monetary policy with special focus on the impact of the eventual reversal of unconventional monetary measures employed by central banks in recent years; and
- Regulatory requirements: e.g. understanding the changing regulatory landscape as well as the impact of ING's actions on existing regulatory boundaries.

The strategic ambitions of ING, together with the design and execution of the funding plan, are assessed under both current and projected market conditions. Key emphasis is placed on understanding overall market trends and developments, credit rating changes and peer comparison.

## Liquidity stress testing

Funding and liquidity stress testing forms part of the overall F&L framework. It allows ING to examine the effects of exceptional but plausible future events on ING's liquidity position and provides insight into which entities, business lines or portfolios are vulnerable to which types of risk and under which scenarios.

The stress testing framework encompasses the funding and liquidity risks of the consolidated balance sheet of ING Group including all entities, business lines as well as on and off-balance sheet positions. The Net liquidity position and Time-to-survive are the two main stress testing output metrics. Both metrics are impacted differently under specific F&L stress scenarios with related parameterisation.

The stress testing framework considers idiosyncratic, market-wide and combined (idiosyncratic and market-wide) stress scenarios. Moreover, it differentiates between stress events that develop in a gradual and in a fast manner. The generic design of the framework, which is based on empirical evidence supplemented by expert judgment, can easily be applied to a specific scenario. For example, it can be used as input for firm-wide stress testing and reverse stress testing.

The outcomes of the stress testing are taken into account in all the key aspects of ING's F&L risk framework and F&L risk management:
- risk appetite framework (through risk appetite statements);
- risk identification and assessment;
- monitoring of the liquidity position;
- contingency funding plan;
- early warning indicators.

The Funding and liquidity stress testing framework is also subject to regular internal validation.

In line with ECB regulation, ING's liquidity position is stress tested on a monthly basis using particular scenarios that form part of the F&L risk appetite statement. In addition, the results of all internal stress scenarios are monitored and assessed on a regular basis. They also serve as input in the decision on additional contingency measures.

Contingent F&L risks are addressed in the contingency funding plan whose focus is on early warning indicators as well as organisation and planning of liquidity management in times of stress. The contingency funding measures are developed in conjunction with the ING recovery plan and are tested on a regular basis.

# Non-financial risk

## Introduction

Non-financial risk is defined as the risk of financial loss, legal or regulatory sanctions, or reputational damage due to inadequate or failing internal processes, people and systems; a failure to comply with laws, regulations and standards; or external events. The Non-Financial Risk (NFR) function encompasses Operational Risk Management (ORM), Information Risk Management (IRM), the Independent Validation Unit (IVU) and Corporate Security & Investigations (CSI).

## Governance

The head of Corporate ORM, Corporate IRM, IVU, CSI, Professional Practice Unit and Strategy, Central Services & Digitalisation Unit report to the global head of NFR, who directly reports to the bank CRO.. The global head of Non-Financial Risk is responsible for developing the framework of non-financial risk policies and standards within ING, and for monitoring the quality of non-financial risk management in the ING entities.

## Non-Financial risk measurement

In line with the Advanced Measurement Approach (AMA), the bank has in place a model to define the required level of own funds for operational risk (operational risk capital). This model predicts potential operational risk losses (annually aggregated) by combining a forward-looking and a backward-looking view on operational risk events. The business has a leading role in assessing scenario severities, with the ORM function validating and challenging the results.

ING uses its AMA model for regulatory capital calculation purposes and reports the regulatory capital numbers on a quarterly basis. The bank is currently not using any insurance or risk transfer mechanisms for the mitigation of risk in the context of the AMA capital calculation.

## Risk categories

ING categorises NFR risks in a number of areas:

- *Information (Technology) risk* is the risk of financial loss, regulatory sanctions or reputational damage due to breaches of confidentiality, integrity or availability within business processes or information or lack of information quality;
- *Continuity risk* is the risk of financial loss, regulatory sanctions or reputational damage due to business disruptions (loss of people, processes, systems, data, premises);
- *Control and processing risk* are the risks of financial loss, regulatory sanctions or reputational damage due to ineffective organisational structures and governance procedures (including unclear roles and responsibilities and inadequate reporting structure), failed (transaction) processing (input, execution, output) or failing process management; monitoring and enforcement of risk mitigating measures; and risk culture;
- *Internal fraud risk* is the risk of financial loss, regulatory sanctions or reputational damage due to deliberate abuse of procedures, systems, assets, products and/or services of ING by employees (incl. temporary workers, third party contractors, internships and consultants) who intend to deceitfully or unlawfully benefit themselves or others;
- *External fraud risk* is the risk of financial loss, regulatory sanctions or reputational damage due to deliberate abuse of procedures, systems, assets, products and/or services of ING by external parties (clients, potential clients or other third parties, including vendors and outside agencies) who intend to deceitfully or unlawfully benefit themselves or others;
- *Unauthorised activity risk* is the risk of financial loss, regulatory sanctions or reputational damage due to employees performing outside the normal course of their business, intentionally giving unauthorised approvals or overstepping their authority;
- *Personal and physical security risk* is the risk of financial loss, regulatory sanctions or reputational damage due to criminal and environmental threats that might endanger the security or safety of ING personnel at work, people in ING locations, ING assets or assets entrusted to ING, people at ING event locations, or might have an impact on ING organisation's confidentiality, integrity or availability; and

- *Employment practice risk* is the risk of financial loss, regulatory sanctions or reputational damage due to acts that are inconsistent with employment, health and/or safety laws, regulations or agreements, from payment of personal injury claims, or from diversity/discrimination events.

## Data Governance and Data Quality

ING recognises that information and underlying data are assets that are key (together with people, processes and IT systems) to further develop its digital profile. Cooperation and mutual agreement on global data management roles and responsibilities in ING are critical success factors to meet this objective. As such ING has embraced multiple data management and governance initiatives triggered by internal and external stakeholders (e.g. Principles for Effective Risk Data Aggregation and Risk Reporting). These principles are embedded in risk data management and enshrined within the Data Governance framework. The framework outlines roles and responsibilities relevant for the risk lifecycle and data quality assurance.

## Main developments in 2019

### Cybercrime and Fraud

Controls and monitoring continue to be embedded in the organisation as part of the overall internal control framework and are continuously re-assessed against existing and new threats. The identification and monitoring of new threat actors and campaigns relevant to ING also informs this process as does the closer alignment between IT security and fraud teams. In addition, ING continues to strengthen its global cybercrime and fraud resilience through extensive collaboration with financial industry peers, law enforcement authorities, government (e.g. National Cybersecurity Centre) and internet service providers (ISPs).

Concerns over the potential impact of insider threats continues to increase with specific information relating to external instances or trends in the financial industry remaining limited, albeit collaboration within the financial sector is improving.

The increasing use of third party vendors for services and the implementation of PSD2 are likely to present ongoing fraud management and IT security challenges; both in the short- and medium-term as criminal actors target financial and broader PII data outside the traditional banking environment.

Dealing with current and emerging fraud threats effectively requires continuous improvement of fraud management capabilities such as real-time transaction and response capabilities and better alignment and standardisation of cross border fraud management across ING and related platforms as well as exchanging data cross border. With legislation such as EBA PSD2 and the continuing emphasis on duty of care, financial institutions are becoming more and more responsible for losses incurred by clients, and taking on more of the burden of reclaiming those losses.

### Enterprise Risk Management

In 2019, a professional practice unit (PPU) has been set up to establish an Enterprise Risk Management ('ERM') Framework gatekeeper for policy design. ERM is designed to be an overarching risk management framework (RMF) pulling together common design principles and roles & responsibilities for all risk types (Financial, Non-financial, and Strategic). The purpose and benefits of the ERM Framework facilitates clear and easy communication and improving the visible and transparent link to ING's Strategy, business activities and processes. The ERM Framework is being implemented to ensure standardisation of all risk frameworks and, once finalised, it will apply to all businesses lines and entities on global and local level.

### User access management (UAM)

UAM is one of the focus areas of ING and an important element in our control framework to mitigate the risk of unauthorized and / or inappropriate access to systems, processes and the data and information contained therein. Consequently, the UAM processes, controls and practices are periodically reviewed, tested, adapted and improved by a dedicated UAM team to address ongoing developments in and outside ING. In 2019, ING continued to mature, with attention to standardization, harmonisation of processes via standardized workflows and further automation of UAM controls, which will continue in 2020.

### GDPR
As per 25 May 2018, the European General Data Protection Regulation (GDPR) became effective. GDPR affords greater protection to individuals and requires more control on data and transparency regarding the use of data by companies. In 2019, ING continued its central programme, initiated in 2016, in a continuing effort to mature our data protection standards in line with GDPR standards.

### Outsourcing Risk
In 2019, a renewed Sourcing Policy became effective, outlining the inherent critical and high risks that can materialise during the sourcing life-cycle. In addition, a Sourcing Guideline was issued to support updated requirements, issued by EBA in 1Q 2019. Support Control Framework (SCF) Sourcing defines the controls that have to be implemented and tested to effectively mitigate the risks. The scope of sourcing encompasses outsourcing to external providers as well as intra-group sourcing.

### BCBS239
In January 2013 the Basel Committee on Banking Supervision published the principles for effective risk data aggregation and risk reporting (BCBS 239), which is adopted by the ECB and became effective for all G-Sib's as of  January 2016.  ING initiated a central program which is continued in 2019 to improve the risk data aggregation and reporting capabilities.

# Compliance risk

## Introduction

Compliance risk is defined as the risk of impairment of ING's integrity, leading to damage to ING's reputation, legal or regulatory sanctions, or financial loss, due to a failure (or perceived failure) to comply with applicable laws, regulations and standards and the ING Orange Code.

## Governance

The Compliance Risk Management function is organised via countries and business lines. The heads of Financial Crime Compliance, Regulatory & Conduct Compliance, Strategy & Transformation Office at the head office, as well as the heads of compliance in the Netherlands and Belux and the business lines Challenge & Growth and Wholesale Banking report to the chief compliance officer (CCO), who is the global head of Compliance Risk Management. This is an independent function that is amongst others responsible for developing and establishing bank-wide policies and minimum standards for managing compliance risks. The CCO assists the Supervisory Board, Executive Board and Management Board Banking in managing ING's compliance risks and control framework. The CCO is a permanent participant of the Risk Committee of the Supervisory Board. The CCO regularly meets the chairman of the Risk Committee of the SB.

## Risk categories

ING categorises compliance risk into four conduct-related integrity risk areas:

- Client/third party conduct refers to the compliance risks arising from the relationship with or generated by the conduct of our customers and/or business partners, like money laundering or terrorist financing. Those risks are generally defined within ING as financial economic crimes. Furthermore, client conduct refers to the compliance risks relating to FATCA, CRS, CTI and US withholding tax and information reporting regulations;
- Personal conduct refers to the compliance risks arising from the conduct of ING employees. The scope includes amongst others personal conduct related conflicts of interest, bribery and corruption, protection of personal data;
- Financial services conduct refers to the compliance risks arising from or generated by the conduct of ING when developing product offerings, marketing and/or selling products and services to its clients as well as customer interest and protection; and
- Organisational conduct refers to the compliance risks arising from the way the bank is organising itself to develop its activities. This category covers among others the licences required to perform its regulated banking activities, the operating effectiveness of its information barriers, organisation conduct conflicts of interest, anti-competitive conduct, record retention.

Controls aiming to mitigate the compliance risks associated with the above-mentioned risk areas are designed and applied to the day-to-day processes in the bank. The effectiveness of the controls is tested and monitored periodically, and senior management is responsible for ensuring that processes are compliant with applicable laws and regulations, ING's internal policies, and the Orange Code.

In cases where an employee of ING suspects an actual or potential irregularity or misconduct within ING that leads or could lead to a violation of the Orange Code, any ING policy and/or any applicable law, regulation or code, this can be reported anonymously in line with the Whistle-blower Policy, via internal or external channels as well as through normal reporting channels.

## Strengthening the global compliance function

ING has introduced measures to strengthen the Compliance Risk Management function. These measures are being implemented as part of a multi-year, global compliance strategy and transformation programme The programme encompasses the whole compliance function and aims at enhancing global steering and oversight by the compliance function.

## Know your customer (KYC)

ING is committed to the preservation of its reputation and integrity through compliance with applicable laws, regulations and ethical standards in each of the markets in which it operates. All employees are expected to adhere to these laws, regulations and ethical standards, and management is responsible for ensuring such compliance. Compliance is therefore an essential ingredient of good corporate governance. As gatekeepers of the financial system we have obligations to safeguard trust in that system and prevent misuse. For example a recent study by Brigitte Unger, University of Utrecht, found almost €13 billion worth of criminal money is laundered in the Netherlands each year – around 1.6 percent of the GDP. However, money laundering is not contained within a single country or jurisdiction, it is a global challenge that impacts the entire financial system. ING, like all other participants in the financial services industry, has an important role to play in helping to combat financial economic crime. We contribute knowledge and capacity to various public-private partnerships fighting financial crime. We believe we can be even more effective in safeguarding the financial system if we join forces and work with other banks and with national and European authorities and law enforcement to identify and manage the financial economic crime risks better, taking all relevant laws and regulations into account. Improving the way we manage compliance risk, especially when it comes to preventing criminals from misusing the financial system, is a key priority for ING.

### KYC policy framework

The know your customer (KYC) policy and related control standards ('KYC policy framework') sets the minimum requirements and control objectives for all ING entities to guard against involvement in financial crime activity. The KYC policy framework reflects relevant national and international laws, regulations and industry standards related to financial economic crime (money laundering, terrorist financing), export trade controls, proliferation financing, sanctions (economic, financial and trade), countries designated by ING as ultra high-risk countries (UHRC), CTI, FATCA, CRS, and (parts of) ESR. The KYC policy framework is mandatory and applies to all ING entities, majority-owned ING business, businesses under management control, staff departments, product lines and to all customer engagements and transactions. The KYC Policy Framework reflects relevant national and international laws, regulations and industry standards related to business partners and overarching requirements with regards to record retention, training and awareness. The management of ING entities also includes local procedures aimed at enabling them to comply with local laws and regulations and the KYC Policy Framework. Where local laws and regulations are more stringent, these more stringent local laws and regulations are applied.

As a result of frequent evaluation of the businesses from economic, strategic and risk perspective ING continues to believe that for business reasons doing business involving certain specified countries should be discontinued. In that respect, ING has a policy not to enter into new relationships with clients from these countries and processes remain in place to discontinue existing relationships involving these countries. At present these countries are Cuba, Iran, North Korea, Sudan and Syria.

In addition to addressing financial economic crime-related requirements, the KYC policy framework also reflects KYC-related requirements of the FATCA/CRS policy, as well as certain elements of the Environmental Social Risk policy.

### KYC enhancement programme

In 2017, ING began implementation of its KYC enhancement programme across all customer segments and in all ING business units. The KYC enhancement programme consists of, among other things:

- Enhancing selected customer due diligence files to improve customer documentation, customer data and identity verification;
- Working on structural solutions to become sustainably better in the execution of our KYC policies, tooling, monitoring, governance and knowledge and behaviour; and
- Assessing selected past transactions and follows the applicable reporting process should any unusual transactions be identified.

In September 2018, ING announced that it had reached a settlement agreement with the Dutch Public Prosecutor related to an investigation that found serious shortcomings in the execution of customer due diligence and transaction monitoring requirements related to fighting financial economic crime, and announced steps to further enhance its management of compliance risks and embed stronger awareness across the whole organisation as part of the KYC enhancement programme.

In 2019, we continued the implementation of the KYC enhancement programme, and had more than 4,000 FTEs working on KYC-related activities globally. In March 2019, ING in Italy took steps to improve its KYC processes and compliance risks in line with the global KYC enhancement programme after the Italian central bank identified shortcomings in anti-money laundering processes. This was based on an inspection conducted from October 2018 to January 2019. In consultation with the Banca d'Italia, ING agreed to refrain from taking on new customers in Italy while further discussions on the enhancement plans took place. ING continued to fully serve existing clients in Italy while working to address the shortcomings and resolve the issues identified. Please refer to Note 46 'Legal proceedings' to the consolidated financial statements for more information.

In 2019, as part of our commitment to enhance the way we manage compliance risks and embed stronger awareness across the whole organisation, we also took the following steps across our five KYC pillars:

- **Policies and risk**: This pillar focuses on the development and roll-out of a global KYC policy, a global KYC risk appetite statements and KYC risk assessments on customers, capability structure and maturity assessments.
  - In 2019, we updated the new KYC policy, which integrated all existing policies related to anti-money laundering, financial economic crime and customer due diligence. It came into effect in July. (See section 'KYC policy framework' above).
  - The global KYC policy may be stricter than local requirements, in which case the global risk appetite statement is used as the starting point to execute a uniform risk assessment and to determine the local KYC-related risk appetite.
  - As part of our due diligence process we updated the environmental and social risk (ESR) framework, which helps us make transparent choices about who and what we finance. All customers undergo an initial ESR check as part of the onboarding process. (See 'Environmental and social risk framework' in the credit risk chapter for more information)
  - We implemented a systematic integrated risk approach (SIRA) in all business lines globally. Driven by data, the SIRA provides guidance on KYC integrity risks and helps determine which customers to accept/continue and the type and frequency of monitoring. It takes into account elements such as where the customer is located and the type of product and sector they are active in. The KYC integrity risks are reviewed each year.

- **Tooling**: This pillar aims to improve processes and tooling around customer due diligence, screening and monitoring. This entails rolling out a bank-wide KYC digital service and fulfilling client acceptance and maintenance life cycle on one global digital platform. In addition, all required screening components (name screening, pre-transaction screening, adverse media screening) are incorporated into the client acceptance due diligence process. Once a customer is onboarded, ongoing screening and monitoring of transactions can then be activated. Steps taken in 2019 included:
  - Developed new customer due diligence case management modules for Private Banking clients in Luxembourg, and mid-corporates in Poland, which is to be rolled out in other countries with similar client segments.
  - The target adverse media screening tool was rolled out in most locations
  - Innovating to automate and improve KYC processes. In 2019, we developed a 'smurfing' tool, which uses artificial intelligence to detect instances of smurfing when large fraudulent transactions are broken up into smaller transactions that will not be flagged by conventional monitoring systems. And we are developing a virtual alerts handler that uses artificial intelligence to reduce the number of false positives, freeing up KYC staff to concentrate on those alerts that do require attention.
  - In September 2019, an anomaly detection tool went live to monitor the payment flow of ING's correspondent banking clients. Developed by ING, the tool uses advanced analytics to detect changes in behaviour that could indicate money laundering or other financial

economic crime. The approach for innovations is per country and business line and based on success will be scaled up and rolled out in other locations.

- **Monitoring and screening**: This pillar entails translating risk assessment outcomes into scenarios and alert definitions that can be applied in transaction monitoring. This includes the design and definitions of the applicable financial economic crime and client activity monitoring scenarios tailored to the entity yet based on a global set, building alert definitions (including data feeds) and validating and testing the approach from risks to alerts.
  - In 2019, we introduced the new standard transaction monitoring tooling in the first countries. This includes risk-based scenarios, with follow-up for handling alerts and reporting suspicious activity.
  - In May 2019, the first version of the global transaction monitoring (TM) control guidance came into effect. It outlines the adoption of a uniform TM methodology framework to mitigate financial economic crime risks.
  - In September 2019, ING partnered with four other Dutch banks to explore options to jointly monitor payment transactions. Transaction Monitoring Netherlands (TMNL) is part of a broader cooperation with the private sector, government agencies, regulators and law enforcement to harmonise efforts to fight financial crime and strengthen the resilience of the financial system as a whole, both on a national and European level. We also work with the Dutch central bank and are a member of the public-private partnership council of the Dutch Financial Expertise Centre (FEC-RAAD PPS).
  - The increased focus on KYC and our efforts to streamline our operations led to an increased number of accounts being closed. This includes inactive accounts and accounts of customers who do not respond adequately to our requests for information. We are also re-evaluating certain client and business relationships.

- **Governance**: Under this pillar we are setting up a global KYC governance to ensure decisionmaking on standards, operations, customer acceptance and continuous improvements. This started with the appointment of a global head of KYC at the end of 2018 and a global Centre of Expertise, as well as a Delivery Tribe, who together with the business lines and the second line of defence (Risk and Compliance functions) are responsible for implementing KYC across the organisation.
  - In 2019, local KYC Committees were established in the countries/regions and business lines to manage and steer all KYC-related activities. These committees are overseen by the global KYC Committee, which drives improvements and ensures alignment between KYC-related projects and activities. It also monitors all KYC-related costs, helps prioritise activities and steers decisions on KYC-related issues and developments.
  - Client Integrity Risk Committees (CIRCs) were set up in the retail business lines and Wholesale Banking to steer decisions around client acceptance and exits, based on compliance criteria and risk appetite. The committee members represent both the first and second lines of defence to ensure proper decision-making is adhered to.

- **Knowledge and behaviour**: This pillar focuses on increasing knowledge about KYC, providing training and carrying out behavioural risk assessments to detect high-risk behaviours, intervening where necessary.
  - Internal communication in 2019 reiterated the importance of non-financial risk and compliance.
  - We set up a global KYC Academy to coordinate a global learning curriculum and provide expert training for specialist KYC staff and new joiners as well as awareness training for all ING employees.
  - The first behavioural risk assessments in KYC were carried out in the Netherlands, the Philippines and the US by ING's team of behavioural experts. The outcomes were discussed by senior management at ING's leadership days in March, as well as with the management teams of the countries involved and in Wholesale Banking with the intention of changing behaviours to enhance KYC, starting from the top.

Following on from that, workstreams were set up with senior managers and a number of interventions were initiated with the aim of changing high-risk behavioural patterns. Another behavioural risk assessment was conducted at ING in Belgium in the fourth quarter of 2019. We will start a dialogue in 2020 to dive into the outcomes and root causes of the behavioural patterns observed.

## Regulatory developments

Compliance with applicable laws and regulations is resource-intensive. Banks continue to be faced with new and increasingly onerous regulatory requirements. Generally, we expect the scope and extent of regulations in the jurisdictions in which we operate to continue to increase.

Regulation is becoming more extensive and complex. An example is the implementation of DAC6 which like FATCA and CRS requires financial institutions to report detailed client-related information to the competent authorities. Customer due diligence (CDD), (sanctions) screening and transaction monitoring impose requirements on financial institutions to maintain appropriate policies, procedures and controls to detect, prevent and report to the competent authorities on e.g. money laundering and terrorist financing.

The increasing regulatory scrutiny drives the need to continuous change in the various processes, procedures and IT systems. In some situations the applicable laws and regulations, at local and/or at global level, seem to be conflicting with each other, which imposes a significant challenge on banks as part of the implementation of requirements. In addition, the timeline for implementation of those new/changed requirements is sometimes very short, which is challenging in general, yet especially in IT development. Obviously ING will continuously work on embedding the processes and procedures reflecting the applicable requirements in our IT systems and data sources, driving a business environment which is compliant by desire and design, and will execute ongoing training and awareness to develop its people to have the right knowledge and skills.

That also accounts for risks deriving from new technologies. As an innovative bank, ING continuously monitors regulatory developments to make risk assessments and define the banks risk appetite. Regulations on distributed ledger technology and business developments in this area are as rapid and impactful as the accompanying risks.

### 5th AML Directive

In addition, the 5th AML Directive will be implemented in the Netherlands. The 5th AML Directive was originally adopted by the EU Council in June 2018, with the aim of addressing means of terrorist financing, increasing transparency to combat money laundering and helping to strengthen the fight against tax avoidance. The most important aspects of the 5th AML Directive involve the (anti money-laundering) risks relating to the use of virtual currencies, the improvement of information exchange between supervising authorities, and the introduction of beneficial ownership registers for corporate and other legal entities.

ING expects to revise the KYC policy framework to reflect the requirements of the 5th AML Directive. Prior to the adoption of the 5th AML Directive, European supervisory authorities (ESAs) had previously issued their final guidelines on risk factors, which came into force in June 2018. These guidelines promote a common understanding of the risk-based approach to anti-money laundering/combatting terrorist financing (AML/CFT) and set out how it should be applied in the context of the 4th AML Directive. These guidelines are currently in the process of being updated, in order to support firms' AML/CFT compliance efforts and enhance the ability of the EU's financial sector to effectively deter and detect money laundering/terrorist financing. The ESAs published a consultation version of the updated guidelines on 5 February 2020. The final updated guidelines are expected to come into force in the course of 2020. Furthermore, in September 2017, the ESAs issued their final guidelines to prevent the abuse of funds transfers for terrorist financing and money laundering purposes. These guidelines came into force in June 2018.

### Financial Account Tax Compliance Act (FATCA)

Under provisions of US tax law commonly referred to as FATCA, non-US financial institutions are required to provide certain information on their US account holders and/or certain US investors to the US Internal Revenue Service (IRS). A 30 percent withholding tax will be imposed on 'withholdable payments' made to non-compliant non-US financial institutions. As part of the actions taken to comply with FATCA and other US withholding tax regulations, ING is for example updating and strengthening its withholding compliance programme and reviewing, amending and filing the necessary tax returns and information reports.

Many countries, including the Netherlands, have entered into agreements (intergovernmental agreements or IGAs) with the US to facilitate the type of information reporting required under FATCA. While the existence of IGAs will not eliminate the risk of the withholding tax described above, these agreements are expected to reduce that risk for financial institutions and investors in countries that have entered into IGAs. IGAs often require financial institutions in those countries to report information on their US account holders to the taxing authorities of those countries, who then pass the information to the IRS.

If the Group cannot rely on IGA or satisfy the requirements, certain payments to the Group may be subject to withholding under FATCA. Certain payments may also be subject to other US withholding tax regulations. The possibility of such withholding and the need for account holders and investors to provide certain information may adversely affect the sales of certain of the Group's products. In addition, compliance with the terms of such IGAs and with FATCA, any regulations or other guidance promulgated thereunder, or any legislation promulgated under an IGA, and offering products that generate 'withholdable payments', may substantially increase the Group's compliance costs.

### Common Reporting Standard (CRS)

Similarly, the Organisation for Economic Cooperation and Development ('OECD') has developed a Common Reporting Standard ('CRS') and model competent authority agreement to enable the multilateral and automatic exchange of financial account information. CRS requires financial institutions to identify and report the tax residency and account details of non-resident customers to the relevant authorities in CRS-compliant jurisdictions. As of 19 September 2019, 109 jurisdictions ('signatory countries'), including the Netherlands, have signed a multilateral competent authority agreement to automatically exchange information pursuant to CRS. The majority of countries where ING has a presence have committed to CRS. The EU has made CRS mandatory for all its member states. The first information exchange by the Netherlands (as for approximately half of the signatory countries) was executed in 2017. Most other signatory countries commenced their information exchange in 2018 and some in 2019.

The OECD has also introduced two additional new measures to tackle global tax avoidance/evasion:

- Mandatory Disclosure Rules for Addressing CRS Avoidance Arrangements and Opaque Offshore Structures
- Preventing Abuse of Residence by Investment (RBI) and Citizenship by Investment (CBI) Schemes to Circumvent the CRS.

These measures are in the process of being implemented in local laws. With regard to the mandatory disclosure rules for EU jurisdictions, this was done via the amendment to Directive 2011/16 (DAC6). See below.

### DAC6 (EU2018/822, an amendment to EU Directive 2011/16)

DAC6 imposes mandatory disclosure requirements for taxpayers and intermediaries involving the reporting of cross-border arrangements affecting at least one EU member state that fall within one of a number of 'hallmarks'. These hallmarks are broad categories setting out particular characteristics identified as potentially indicative of aggressive tax avoidance. The reporting obligations apply to 'intermediaries' (financial institutions like ING may fall under this term) or, in some circumstances, the taxpayer itself. There will be a mandatory automatic exchange of information on such reportable cross-border schemes via the Common Communication Network (CCN) between the member states which will be set-up by the EU. Although DAC6 is not effective until 1 July 2020, taxpayers and intermediaries have been required to monitor cross-border arrangements since 25 June 2018.

### MiFID II

Integrity and transparency in financial markets are essential for public and investor confidence. The revised Markets in Financial Instruments Directive European legislation (MiFID II/MiFIR) came into effect in January 2018 and had a major impact on ING and the markets in which it operates. A central programme continued in 2019 to support ING's commitment to further embed the revised legislation throughout the organisation.

The requirements set out in MiFID II/MiFIR are manifold and impact a large part of our organisation and day-to-day business. In order to ensure compliance with these rules, standard controls were rolled out throughout the ING EU entities. In addition, a framework measuring MiFID compliance risk was implemented in order to stay abreast of any compliance issues that need addressing.

Regulatory guidance around MiFID II/MiFIR continues to evolve and key requirements are currently under review. As a result, ING will ensure that the organisation has continuous access to central guidance giving a clear steer on expected conduct and processes. A network of experts has been set up to ensure timely implementation of any regulatory changes.

## Learning

In 2019 we continued to develop our approach to learning on compliance and risk culture (and e.g. established the KYC Academy). Supporting staff to deliver a sound and consistent risk culture is a focus for our learning. We emphasise a standard and streamlined approach that facilitates consistent messaging and learning across the bank, as appropriate.  More focus is being given to role of specific training in ensuring staff continue to extend knowledge, skills and behaviours for their particular roles and responsibilities.

# Model Risk

## Introduction

Model risk is the risk that the financial or reputational position of ING is negatively impacted as a consequence of the use of models. Model risk can arise from errors in the development, implementation, use or interpretation of models, or from incomplete or wrong data etc., leading to inaccurate, noncompliant or misinterpreted model outputs.

A model is defined as a quantitative method, system, or approach that applies statistical, economic, financial, or mathematical theories, techniques, and assumptions to process input data into quantitative estimates.

A candidate model is considered a model when:

- the outcome is used for a decision: by the customer, community, business / colleagues, and / or other internal or external stakeholders, such as regulators or shareholders, and
- the model is repeatedly used without a manual change of the design, and
- the outcome is an estimation, not the 100 percent measured truth; and
- it processes the data input with a quantitative method or approach that applies statistical, economic, financial, or mathematical theories, techniques and / or assumptions.

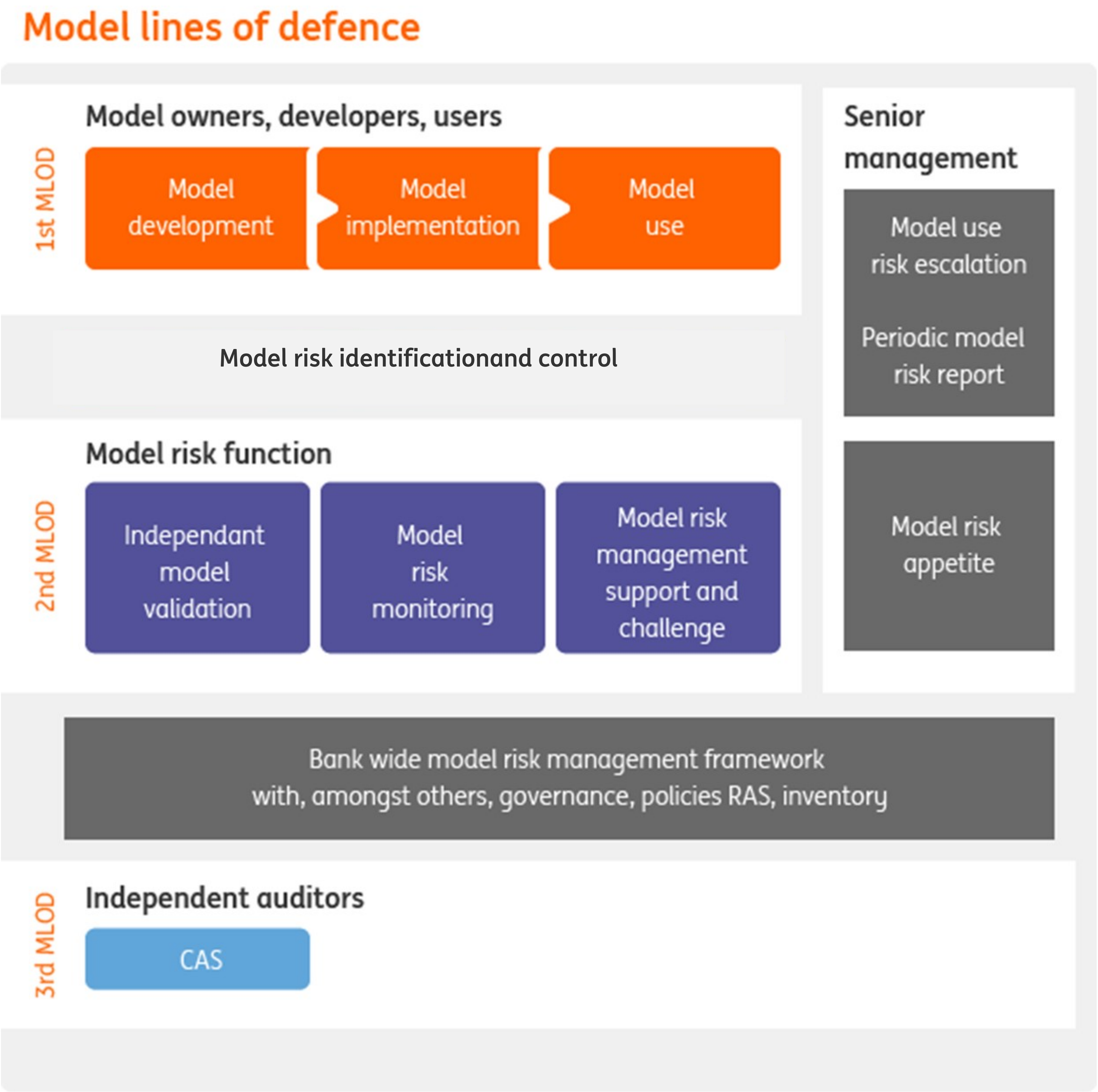
## Models governance

The growing complexity and number of models created and utilised every year for decision-making makes it important to manage and control the associated model risk accordingly. Within ING this overarching responsibility for this risk type lies within Model Risk Management. The department, in addition to its traditional function of model validation, is also responsible for global model risk oversight. It sets and maintains a model risk management framework containing: (1) the governance, (2) the model risk appetite, (3) model risk management policies and standards and (4) the global model inventory tool. It is also responsible for monitoring and reporting the global model risk exposures of ING.

The Model Risk Management Committee (MoRMC) has been established to align the overall model strategy and the model risk appetite, and approve model policies, procedures and methodologies. Mandated by the MBB and chaired by the CRO of ING, the MoRMC meets monthly.

## Model lines of defence

ING's model risk and control structure is based on the three model lines of defence (MLoD) approach. This approach aims to provide a sound governance framework for model risk management by defining and implementing three different management layers with distinct roles and oversight responsibilities.




In terms of composition and main activities:

- The 1st LoD is composed of the model owners (mainly the business), data management and model development, accountable for, among others, the development, implementation and use of the models as well as monitoring the effectiveness of the models;
- The 2nd LoD is composed of model validation and model risk management, which owns the model risk management framework and the  risk appetite; and
- The 3rd LoD is the internal audit, reviewing the quality of execution in all lines of defence and providing independent assurance.

An important difference with the financial and non-financial risk lines of defence is that models can also be owned by risk (normally a 2nd LoD), e.g. for bank-wide stress testing, or by the audit service (normally a 3rd LoD), e.g. to support their audits. In that case, both domains (risk or audit service) become 1st model line of defence.

### Model Risk Appetite (MoRAS)

The model risk appetite is designed to control the level of model risk ING is willing to accept in pursuit of its strategic objectives. It is derived from the concepts of boundaries and instruments as described in the Risk Appetite Framework. Model RAS and related boundaries and instruments will be set in 2020 and going forward will be reviewed on an annual basis. RAS requires approval from the MBB/EB and ratification from SB.

## Model risk management

Since models are by definition simplifications of reality, model risk is inherent in the use of models and therefore model risk must be identified and managed. Model risk management includes the identification, assessment, control (acceptance or mitigation) and monitoring (and reporting) of the risks caused by applying models.

Model management is executed through the model life cycle with two types of components, which are (i) the stages that each individual model goes through, from initiation to final decommissioning and (ii) the overarching components to manage ING's model risk of all models: continuous model inventory and reporting.

## Model lifecycle

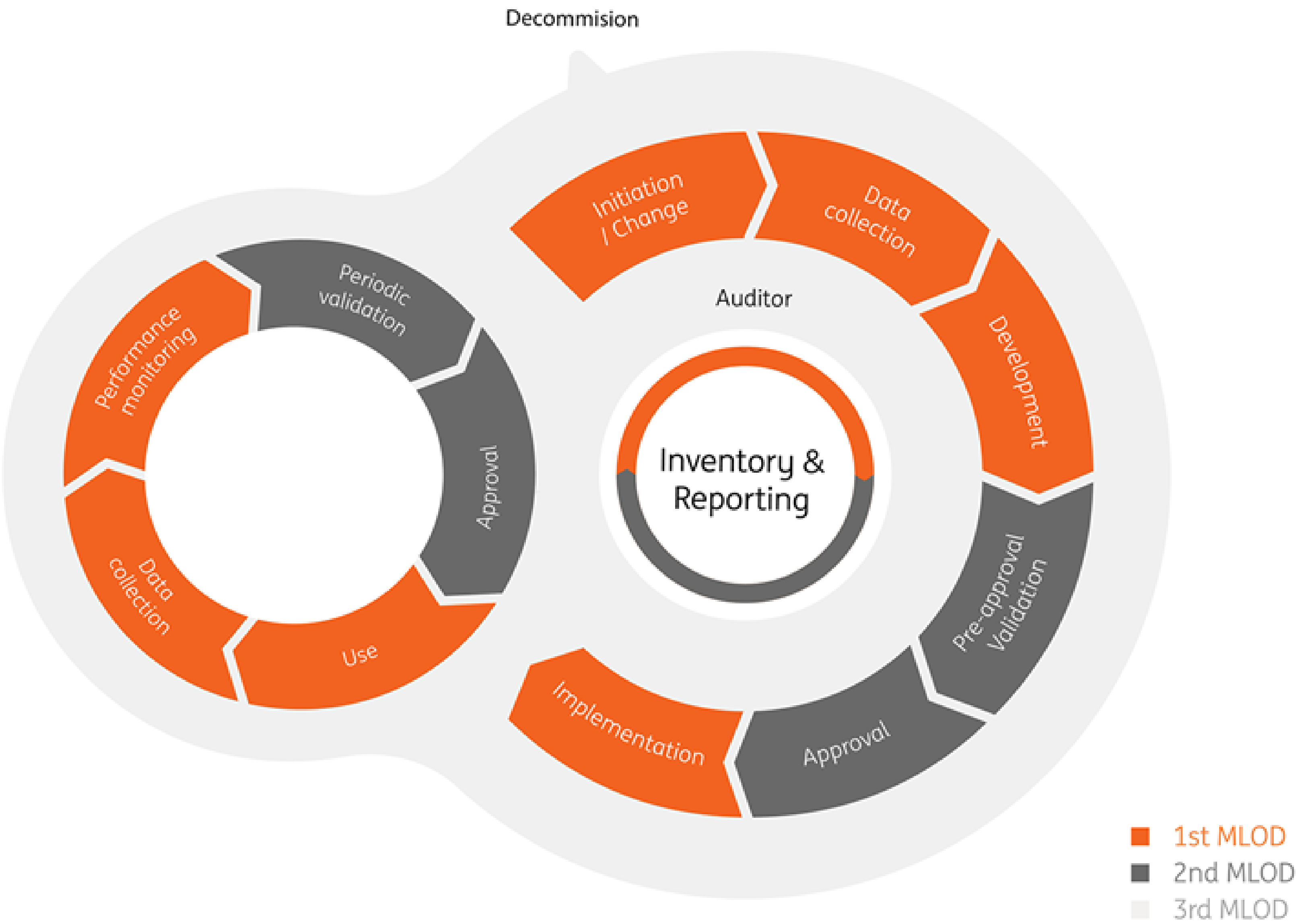
The next figure provides a schematic overview of the model lifecycle, where orange represents the 1st model LoD, blue the 2nd and grey the 3rd.  It is composed of a set of processes starting after a model is identified. The objectives of the different processes are outlined below.

**Initiation or change**: The initiation of the development of a new model or change of an existing model can be triggered by different factors. These may be (i) internal, such as the introduction of a new product that cannot be handled by the existing models, a change in ING's organisation, financial or commercial strategy or findings and issues by an auditor, validator or based on monitoring; or (ii) external, such as innovation/new technology that becomes available (for example the Fintech models), new or upcoming supervisory regulations or ongoing technical developments.

**Data collection** is the process of defining and collecting data that meets the defined data quality requirements for model development. The process includes the definition of the data needed, assessment of data availability and quality, assumptions and limitations, as well as the gathering of the data needed for the analyses, impact study and testing during the model development process.

**Model development** is a structured process that leads to a model that is ready for validation and subsequent use.

Depending on the development approach these first stages can be separate or integrated. An example of the latter is data science based application development.




**Pre-approval validation** is the independent confirmation that the model is valid for its intended use, before the new or changed model is submitted for use approval. To ensure objectivity and effective challenge, the model validator is independent from other model parties such as the model developer, model owner or model approver. Model validation applies equally to in-house developed and third-party models.

The objective of the **model approval** stage is approval for use. The model owner submits the model for formal consent by the internal approver before being deployed and used. The recommendations and validation report prepared by the model validator are key inputs for approval for use.

During the **implementation** stage, the model is realised, tested and made available in a production environment.

In the **model use** stage the model is applied by the users for the specific purpose it was designed for. The model can only be used after formal validation and approval for use of the model.

The objective of model **performance monitoring** is to regularly check if the model is performing as intended, also after possible changes in the commercial, organisational or legal environment. Model performance monitoring begins when model use has started and continues until the model has officially been decommissioned.

**Periodic validation**: During the life time of a model the ongoing validity of the models must be safeguarded. This is done by periodical independent (re)validation that assesses whether the model is still valid for its intended use. There are two types of validation: (1) periodic, such as annual, which is mandatory for regulatory models, or (2) ad hoc, for example triggered by changes in the model, the business or financial instruments etc. The actual frequency of periodic validation depends on the model risk, model type and applicable regulation.

A model that is / will no longer be used must be decommissioned. **Decommissioning** disables the model. It can, for example, be triggered because (1) the product, organisation or risk the model is made for has changed considerably or no longer exists, (2) the model is outdated, underperforming or better alternatives are available, (3i) the model became obsolete due to standardisation or (4) the external approver withdraws its approval for the model.

**Continuous model inventory and reporting**: Keeping an inventory of all models and their status during their lifecycle is a continuous process. It supports management and control of the models in scope, both per individual model and the overarching management of all ING's models. Periodic model risk reporting provides the relevant internal and external stakeholders with an overview of the models in use and the associated model risk given the defined model risk appetite.

# Business Risk

## Introduction

Business Risk for ING has been defined as the exposure to value loss due to fluctuations in volumes/margins as well as expenses. It is the risk inherent to strategy decisions and internal efficiency. Business risk capital is calculated via the variance-covariance methodology for expense risk, covering the risk that expenses will deviate from the expected expenses over the horizon of the relevant activities. This risk primarily relates to inability of adjusting expenses when that is needed. Expense risk only concerns non-financial expenses (e.g. staff and IT expenses); financial expenses are not in scope.

## Governance and risk management

ING applies an explicit Risk Appetite Statement regarding business risk, focusing on earnings stability and diversification of the business mix. Avoiding putting all eggs in one basket reduces the risk that volumes and/or margins will suddenly drop due to unexpected changes in the business environment for certain markets and products. Furthermore, the underlying risk types (expense risk and volume-margin risk) are mitigated and managed differently. Expense risk is monitored and managed via the financial performance of the bank and the local units, whereby the reported expense numbers are compared on a quarterly basis with the projected cost/income ratio. Deviations from this ambition are monitored as part of the financial projections that are discussed continuously within different parts of the organisation.

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# Consolidated statement of financial position

As at 31 December

| in EUR million | 2019[1] | 2018 |
|---|---|---|
| **Assets** | | |
| Cash and balances with central banks 2 | 53,202 | 49,987 |
| Loans and advances to banks 3 | 35,136 | 30,422 |
| Financial assets at fair value through profit or loss 4 | | |
| – Trading assets | 49,254 | 50,152 |
| – Non-trading derivatives | 2,257 | 2,664 |
| – Designated as at fair value through profit or loss | 3,076 | 2,887 |
| – Mandatorily at fair value through profit or loss | 41,600 | 64,783 |
| Financial assets at fair value through other comprehensive income 5 | 34,468 | 31,223 |
| Securities at amortised cost 6 | 46,108 | 47,276 |
| Loans and advances to customers 7 | 611,765 | 592,196 |
| Investments in associates and joint ventures 8 | 1,790 | 1,203 |
| Property and equipment 9 | 3,172 | 1,659 |
| Intangible assets 10 | 1,916 | 1,839 |
| Current tax assets | 251 | 202 |
| Deferred tax assets 37 | 730 | 841 |
| Other assets 11 | 7,018 | 8,433 |
| Assets held for Sale 12 | | 1,262 |
| Total assets | **891,744** | **887,030** |

| | 2019[1] | 2018 |
|---|---|---|
| **Liabilities** | | |
| Deposits from banks 13 | 34,826 | 37,330 |
| Customer deposits 14 | 574,433 | 555,812 |
| Financial liabilities at fair value through profit or loss 15 | | |
| – Trading liabilities | 28,042 | 31,215 |
| – Non-trading derivatives | 2,215 | 2,299 |
| – Designated as at fair value through profit or loss | 47,684 | 59,179 |
| Current tax liabilities | 554 | 822 |
| Deferred tax liabilities 37 | 695 | 640 |
| Provisions 16 | 688 | 1,011 |
| Other liabilities 17 | 12,829 | 13,510 |
| Debt securities in issue 18 | 118,528 | 119,751 |
| Subordinated loans 19 | 16,588 | 13,724 |
| Total liabilities | **837,082** | **835,295** |
| | | |
| **Equity 20** | | |
| Share capital and share premium | 17,117 | 17,088 |
| Other reserves | 3,990 | 3,586 |
| Retained earnings | 32,663 | 30,258 |
| Shareholders' equity (parent) | **53,769** | **50,932** |
| Non-controlling interests | 893 | 803 |
| Total equity | **54,662** | **51,735** |
| | | |
| Total liabilities and equity | **891,744** | **887,030** |

1 The amounts for the period ended December 2019 have been prepared in accordance with IFRS 16. The right-of-use-assets are presented under line-item 'Property and Equipment' and the lease liability is included in line-item 'Other liabilities'. Prior period amounts have not been restated.

References relate to the accompanying notes. These are an integral part of the Consolidated financial statements.

# Consolidated statement of profit or loss

for the years ended 31 December

| in EUR million | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|
| **Continuing operations** | | | |
| Interest income using effective interest rate method | 25,347 | 25,268 | n/a |
| Other interest income | 3,107 | 2,880 | n/a |
| Total interest income | **28,454** | **28,148** | **44,064** |
| | | | |
| Interest expense using effective interest rate method | –11,291 | –11,235 | n/a |
| Other interest expense | –3,084 | –2,997 | n/a |
| Total interest expense | **–14,376** | **–14,232** | **–30,350** |
| | | | |
| Net interest income 21 | **14,079** | **13,916** | **13,714** |
| | | | |
| Fee and commission income | 4,439 | 4,240 | 3,865 |
| Fee and commission expense | –1,571 | –1,442 | –1,155 |
| Net fee and commission income 22 | **2,868** | **2,798** | **2,710** |
| | | | |
| Valuation results and net trading income 23 | 754 | 1,124 | 628 |
| | | | |
| Investment income 24 | 188 | 183 | 192 |
| Share of result from associates and joint ventures 8 | 48 | 143 | 178 |
| Result on disposal of group companies 25 | 117 | –123 | 1 |
| Other income 26 | 252 | 136 | 350 |
| Total income | **18,306** | **18,176** | **17,773** |

| | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|
| Addition to loan loss provisions 7 | 1,120 | 656 | 676 |
| Staff expenses 27 | 5,755 | 5,420 | 5,202 |
| Other operating expenses 28 | 4,598 | 5,262 | 4,627 |
| Total expenses | **11,472** | **11,338** | **10,505** |
| | | | |
| Result before tax from continuing operations | **6,834** | **6,838** | **7,268** |
| | | | |
| Taxation 37 | 1,955 | 2,027 | 2,281 |
| Net result from continuing operations | **4,879** | **4,811** | **4,987** |
| | | | |
| Net result (before non-controlling interests) | **4,879** | **4,811** | **4,987** |
| Net result attributable to Non-controlling interests | 99 | 108 | 82 |
| Net result attributable to shareholders of the parent | **4,781** | **4,703** | **4,905** |

1 The amounts for the period ended 31 December 2019 and 2018 have been prepared in accordance with IFRS 9. The adoption of IFRS 9 led to new presentation requirements. 2017 period amounts have not been restated. 2018 amounts in other interest income and other interest expense have been updated to improve consistency and comparability.

References relate to the accompanying notes. These are an integral part of the Consolidated financial statements.

# Consolidated statement of profit or loss - continued

| in EUR | 2019 | 2018 | 2017 |
|---|---|---|---|
| **Earnings per ordinary share** 29 | | | |
| Basic earnings per ordinary share | 1.23 | 1.21 | 1.26 |
| Diluted earnings per ordinary share | 1.23 | 1.21 | 1.26 |
| | | | |
| **Earnings per ordinary share from continuing operations** 29 | | | |
| Basic earnings per ordinary share from continuing operations | 1.23 | 1.21 | 1.26 |
| Diluted earnings per ordinary share from continuing operations | 1.23 | 1.21 | 1.26 |
| | | | |
| Dividend per ordinary share 30 | **0.69** | **0.68** | **0.67** |

References relate to the accompanying notes. These are an integral part of the Consolidated financial statements.

# Consolidated statement of comprehensive income

for the years ended 31 December

| in EUR million | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|
| **Net result (before non-controlling interests)** | 4,879 | 4,811 | 4,987 |
| | | | |
| **Other comprehensive income** | | | |
| Items that will not be reclassified to the statement of profit or loss: | | | |
| Realised and unrealised revaluations property in own use | 58 | 1 | 26 |
| Remeasurement of the net defined benefit asset/liability 36 | 58 | 6 | –29 |
| Net change in fair value of equity instruments at FVOCI | 139 | –461 | n/a |
| Change in fair value of own credit risk of financial liabilities at FVPL | –116 | 199 | n/a |
| | | | |
| Items that may subsequently be reclassified to the statement of profit or loss: | | | |
| Unrealised revaluations AFS investments and other revaluations | n/a | n/a | –283 |
| Realised gains/losses on AFS investments reclassified to the statement of profit or loss | n/a | n/a | –92 |
| Net change in fair value of debt instruments at FVOCI | –30 | –163 | n/a |
| Realised gains/losses on debt instruments at FVOCI reclassified to the statement of profit or loss | –34 | –56 | n/a |
| Changes in cash flow hedge reserve | 640 | 382 | –525 |
| Exchange rate differences | –29 | –396 | –864 |
| Share of other comprehensive income of associates and joint ventures and other income | – | 14 | -5 |
| **Total comprehensive income** | **5,564** | **4,337** | **3,215** |
| | | | |
| **Comprehensive income attributable to:** | | | |
| Non-controlling interests | 142 | 132 | 109 |
| Equity holders of the parent | 5,422 | 4,206 | 3,106 |
| | **5,564** | **4,337** | **3,215** |

1 The amounts for the period ended 31 December 2019 and 2018 have been prepared in accordance with IFRS 9. The adoption of IFRS 9 led to new presentation requirements. 2017 period amounts have not been restated.

References relate to the accompanying notes. These are an integral part of the Consolidated financial statements.

For the disclosure on the income tax effects on each component of the other comprehensive income reference is made to Note 37 'Taxation'.

# Consolidated statement of changes in equity

For the years ended 31 December

| in EUR million | Share capital and share premium | Other reserves | Retained earnings | Share-holders' equity (parent) | Non-controlling interests | Total equity |
|---|---|---|---|---|---|---|
| **Balance as at 31 December 2018** | 17,088 | 3,586 | 30,258 | 50,932 | 803 | 51,735 |
| | | | | | | |
| Net change in fair value of equity instruments at fair value through other comprehensive income | | –335 | 472 | 137 | 1 | 139 |
| Net change in fair value of debt instruments at fair value through other comprehensive income | | –31 | | –31 | 1 | –30 |
| Realised gains/losses on debt instruments at fair value through other comprehensive income reclassified to the statement of profit or loss | | –33 | | –33 | –1 | –34 |
| | | | | | | |
| Changes in cash flow hedge reserve | | 604 | | 604 | 36 | 640 |
| Realised and unrealised revaluations property in own use | | 49 | 9 | 58 | –0 | 58 |
| Remeasurement of the net defined benefit asset/liability 36 | | 58 | | 58 | | 58 |
| Exchange rate differences and other | | –36 | | –36 | 7 | –29 |
| Share of other comprehensive income of associates and joint ventures and other income | | 69 | –69 | | | |
| Change in fair value of own credit risk of financial liabilities at fair value through profit or loss | | –123 | 6 | –116 | | –116 |
| Total amount recognised directly in other comprehensive income net of tax | | **223** | **418** | **641** | **44** | **685** |
| Net result | | 180 | 4,601 | 4,781 | 99 | 4,879 |
| Total comprehensive income net of tax | | **403** | **5,019** | **5,422** | **142** | **5,564** |
| | | | | | | |
| Dividends 30 | | | –2,650 | –2,650 | –29 | –2,679 |
| Changes in treasury shares | | 1 | | 1 | | 1 |
| Employee stock option and share plans | 28 | | 13 | 41 | 0 | 41 |
| Changes in the composition of the group and other changes | | | 23 | 23 | –23 | -0 |
| **Balance as at 31 December 2019** | **17,117** | **3,990** | **32,663** | **53,769** | **893** | **54,662** |

References relate to the accompanying notes. These are an integral part of the Consolidated financial statements.
Changes in individual reserve components are presented in Note 20 ‘Equity’.

# Consolidated statement of changes in equity - continued

| in EUR million | Share capital and share premium | Other reserves | Retained earnings | Share-holders' equity (parent) | Non-controlling interests | Total equity |
|---|---|---|---|---|---|---|
| **Balance as at 31 December 2017** | 17,045 | 4,362 | 28,999 | 50,406 | 715 | 51,121 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | –653 | –390 | –1,043 | –14 | –1,057 |
| **Balance as at 1 January 2018** | 17,045 | 3,709 | 28,609 | 49,363 | 700 | 50,063 |
| | | | | | | |
| Net change in fair value of equity instruments at fair value through other comprehensive income | | –518 | 56 | –461 | 0 | –461 |
| Net change in fair value of debt instruments at fair value through other comprehensive income | | –163 | | –163 | 0 | –163 |
| Realised gains/losses on debt instruments at fair value through other comprehensive income reclassified to the statement of profit or loss | | –54 | | –54 | –2 | –56 |
| | | | | | | |
| Changes in cash flow hedge reserve | | 342 | | 342 | 41 | 382 |
| Realised and unrealised revaluations property in own use | | –2 | 3 | 1 | –0 | 1 |
| Remeasurement of the net defined benefit asset/liability 36 | | 6 | | 6 | | 6 |
| Exchange rate differences and other | | –380 | | –380 | –16 | –396 |
| Share of other comprehensive income of associates and joint ventures and other income | | 283 | –270 | 14 | | 14 |
| Change in fair value of own credit risk of financial liabilities at fair value through profit or loss | | 199 | | 199 | | 199 |
| Total amount recognised directly in other comprehensive income net of tax | | **–287** | **–211** | **–498** | **24** | **–474** |
| Net result | | 160 | 4,543 | 4,703 | 108 | 4,811 |
| Total comprehensive income net of tax | | **–127** | **4,333** | **4,206** | **132** | **4,337** |
| | | | | | | |
| Dividends 30 | | | –2,607 | –2,607 | –61 | –2,668 |
| Changes in treasury shares | | 4 | | 4 | | 4 |
| Employee stock option and share plans | 44 | | 19 | 63 | 0 | 63 |
| Changes in the composition of the group and other changes[1] | | | –96 | –96 | 31 | –65 |
| **Balance as at 31 December 2018** | **17,088** | **3,586** | **30,258** | **50,932** | **803** | **51,735** |

1 Includes an amount for the initial recognition of the redemption liability related to the acquisition of Payvision Holding B.V. and Makelaarsland B.V. that reduces the Retained earnings of the Group. Future remeasurements of the redemption liability are recognised in the statement of profit or loss.

# Consolidated statement of changes in equity - continued

| in EUR million | Share capital and share premium | Other reserves | Retained earnings | Share-holders' equity (parent) | Non-controlling interests | Total equity |
|---|---|---|---|---|---|---|
| **Balance as at 1 January 2017** | 16,989 | 5,897 | 26,907 | 49,793 | 606 | 50,399 |
| | | | | | | |
| Unrealised revaluations available-for sale investments and other revaluations | | –293 | | –293 | 10 | –283 |
| Realised gains/losses transferred to the statement of profit or loss | | –90 | | –90 | –2 | –92 |
| Changes in cash flow hedge reserve | | –514 | | –514 | –11 | –525 |
| Unrealised revaluations property in own use | | | 26 | 26 | | 26 |
| Remeasurement of the net defined benefit asset/liability 36 | | –29 | | –29 | | –29 |
| Exchange rate differences | | –894 | | –894 | 30 | –864 |
| Share of other comprehensive income of associates and joint ventures and other income | | 138 | –143 | –5 | | –5 |
| Total amount recognised directly in other comprehensive income | | **–1,682** | **–117** | **–1,799** | **27** | **–1,772** |
| Net result from continuing and discontinued operations | | 153 | 4,752 | 4,905 | 82 | 4,987 |
| Total comprehensive income net of tax | | **–1,529** | **4,635** | **3,106** | **109** | **3,215** |
| | | | | | | |
| Dividends 30 | | | –2,564 | –2,564 | | –2,564 |
| Changes in treasury shares | | –6 | | –6 | | –6 |
| Employee stock option and share plans | 56 | | 21 | 77 | | 77 |
| **Balance as at 31 December 2017** | **17,045** | **4,362** | **28,999** | **50,406** | **715** | **51,121** |

# Consolidated statement of cash flows

for the years ended 31 December

| in EUR million | | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|---|
| **Cash flows from operating activities 31** | | | | |
| **Result before tax** | | 6,834 | 6,838 | 7,268 |
| Adjusted for: | – Depreciation and amortisation | 789 | 520 | 520 |
| | – Addition to loan loss provisions | 1,120 | 656 | 676 |
| | – Other non cash items included in Result before tax | 32 | –1,763 | 703 |
| Taxation paid | | –2,345 | –1,602 | –1,691 |
| Changes in: | – Net change in Loans and advances to/from banks, not available/payable on demand | –3,911 | –211 | 3,194 |
| | – Net change in Trading assets and Trading liabilities | –2,568 | 9,910 | –11,187 |
| | – Loans and advances to customers | –16,687 | –31,253 | –20,505 |
| | – Customer deposits | 18,040 | 19,753 | 18,223 |
| | – Other 31 | 11,752 | 4,067 | –2,454 |
| **Net cash flow from/(used in) operating activities** | | **13,055** | **6,915** | **–5,253** |
| **Cash flows from investing activities** | | | | |
| Investments and advances: | | | | |
| | – Acquisition of subsidiaries, net of cash acquired | –17 | –111 | |
| | – Associates and joint ventures | –507 | –97 | –79 |
| | – Available-for-sale investments | n/a | n/a | –21,601 |
| | – Held-to-maturity investments | n/a | n/a | –3,609 |
| | – Financial assets at FVOCI | –16,270 | -10,517 | n/a |
| | – Securities at amortised cost | –12,268 | -17,985 | n/a |
| | – Property and equipment | –355 | –286 | –304 |
| | – Other investments | –395 | –258 | –264 |

| | | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|---|
| Disposals and redemptions: | | | | |
| | – Associates and joint ventures | 67 | 116 | 245 |
| | – Available-for-sale investments | n/a | n/a | 32,788 |
| | – Held-to-maturity investments | n/a | n/a | 2,675 |
| | – Financial assets at FVOCI | 13,390 | 15,657 | n/a |
| | – Securities at amortised cost | 13,001 | 18,709 | n/a |
| | – Property and equipment | 81 | 17 | 79 |
| | – Loans sold | 744 | 206 | 1,815 |
| | – Other investments | 34 | | 9 |
| **Net cash flow from/(used in) investing activities** | | **–2,495** | **5,451** | **11,754** |
| **Cash flows from financing activities** | | | | |
| | Proceeds from debt securities | 90,793 | 152,543 | 95,458 |
| | Repayments of debt securities | –94,497 | –131,170 | –96,837 |
| | Proceeds from issuance of subordinated loans | 3,429 | 1,859 | 2,331 |
| | Repayments of subordinated loans | –933 | –4,646 | –2,343 |
| | Repayments of principal portion of lease liabilities [2] | –271 | n/a | n/a |
| | Purchase/sale of treasury shares | 1 | 4 | 7 |
| | Dividends paid | –2,679 | –2,607 | –2,564 |
| | Other financing | 2 | | |
| **Net cash flow from/(used in) financing activities** | | **–4,154** | **15,983** | **–3,948** |
| **Net cash flow** | | **6,406** | **28,349** | **2,553** |
| **Cash and cash equivalents at beginning of year 33** | | 47,529 | 18,977 | 16,164 |
| Effect of exchange rate changes on cash and cash equivalents | | 95 | 204 | 260 |
| **Cash and cash equivalents at end of year 33** | | **54,031** | **47,529** | **18,977** |

1 The amounts for the period ended 31 December 2019 and 2018 have been prepared in accordance with IFRS 9. The adoption of IFRS 9 led to new presentation requirements. 2017 period amounts have not been restated.

2 The amount for the period ended 31 December 2019 has been prepared in accordance with IFRS 16. Previous period amounts have not been restated.

# Consolidated statement of cash flows - continued

As at 31 December 2019, Cash and cash equivalents includes cash and balances with central banks of EUR 53,202 million (2018: EUR 49,987 million; 2017: EUR 21,989 million). The increase in cash and balances with central banks reflects ING's liquidity management. Reference is made to Note 33 'Cash and cash equivalents'.

References relate to the accompanying notes. These are an integral part of the Consolidated financial statements.

The table below presents the Interest and dividend received and paid.

| in EUR million | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|
| Interest received | 28,957 | 28,722 | 45,014 |
| Interest paid | –14,550 | –14,948 | –31,032 |
| | **14,407** | **13,774** | **13,982** |
| | | | |
| Dividend received[2] | 219 | 183 | 206 |
| Dividend paid | –2,679 | –2,607 | –2,564 |

1 The amounts for the period ended 31 December 2019 and 2018 have been prepared in accordance with IFRS 9, the adoption of IFRS 9 led to new presentation requirements; 2017 period amounts have not been restated, refer also to note 21 'Net interest income'.
2 Includes dividends received as recognized within Investment Income, from equity securities included in the Financial assets at fair value through profit or loss, Financial assets at fair value through OCI, and from Investments in associates and joint ventures. Dividend paid and received from trading positions have been included.

Interest received, interest paid and dividends received are included in operating activities in the Consolidated statement of cash flow. Dividend paid is included in financing activities in the Consolidated statement of cash flow.

# Notes to the Consolidated financial statements

## 1 Basis of preparation and accounting policies

### 1.1 Reporting entity

ING Groep N.V. is a company domiciled in Amsterdam, the Netherlands. Commercial Register of Amsterdam, number 33231073. These Consolidated financial statements, as at and for the year ended 31 December 2019, comprise ING Groep N.V. (the Parent company) and its subsidiaries, together referred to as ING Group. ING Group is a global financial institution with a strong European base, offering a wide range of retail and wholesale banking services to customers in over 40 countries.

### 1.2 Authorisation of the Consolidated financial statements

The ING Group Consolidated financial statements, as at and for the year ended 31 December 2019, were authorised for issue in accordance with a resolution of the Executive Board on 2 March 2020. The Executive Board may decide to amend the financial statements as long as these are not adopted by the General Meeting of Shareholders. The General Meeting of Shareholders may decide not to adopt the financial statements, but may not amend these.

### 1.3 Basis of preparation of the Consolidated financial statements

The ING Group Consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and the relevant articles of Part 9 of Book 2 of the Dutch Civil Code.

IFRS as adopted by the EU are IFRS Standards and IFRS Interpretations as issued by the International Accounting Standards Board (IASB) and the IFRS Interpretations Committee (IFRIC) with some limited modifications such as the temporary 'carve-out' from IAS 39 'Financial Instruments: Recognition and Measurement' (herein, referred to as IFRS).

Under the EU carve-out, ING Group applies fair value hedge accounting to portfolio hedges of interest rate risk (macro hedging). For further information, reference is made to paragraph 1.6.5 'Derivatives and hedge accounting' of Note 1 and Note 39 'Derivatives and hedge accounting'.

The ING Group Consolidated financial statements have been prepared on a going concern basis.

The consolidated financial statements are presented in euros and rounded to the nearest million, unless stated otherwise. Amounts may not add up due to rounding.

#### 1.3.1 Presentation of Risk management disclosures

To improve transparency, reduce duplication and present related information in one place, certain disclosures of the nature and extent of risks related to financial instruments required by IFRS 7 are now included in the 'Risk management' section of the Annual Report.

These disclosures are an integral part of ING Group Consolidated financial statements and are indicated in the 'Risk management' section by orange brackets.

### 1.4 Changes to accounting policies

ING Group has consistently applied its accounting policies to all periods presented in these Consolidated financial statements, except for changes due to the introduction of IFRS 16 in 2019 and IFRS 9 in 2018. Comparatives were not restated when applying these Standards.

### 1.4.1 Changes in IFRS effective in 2019
ING Group changed its accounting policies in 2019 as a result of adopting IFRS 16 'Leases'. The impact of the adoption of IFRS 16 is disclosed in paragraph 1.4.3 'Changes to accounting policies in 2019' of Note 1.

ING Group early adopted the amendments to IAS 39 'Financial Instruments: Recognition and Measurement' and IFRS 7 'Financial Instruments: Disclosures' in relation to the Interest Rate Benchmark Reform as issued by the IASB in September 2019 (endorsed by the EU in January 2020). These amendments are early adopted retrospectively to hedging relationships that existed at the start of the reporting period or were designated thereafter. The amendments provide temporary relief from applying specific hedge accounting requirements to hedging relationships directly affected by IBOR reform. The amendments require certain additional disclosures and have no further impact. Refer to paragraph 1.6.5 of Note 1 and to Note 39 'Derivatives and hedge accounting' for more information on the adoption of these amendments.

The other changes in IFRS that became effective in 2019 did not have a significant impact on ING Group's accounting policies, ING Group's results or financial position:
- Annual Improvements to IFRS Standards 2015-2017 Cycle: Amendments to IFRS 3 'Business Combinations', IFRS 11 'Joint Arrangements', IAS 12 'Income Taxes', IAS 23 'Borrowing Costs' (issued on 12 December 2017);
- Amendments to IAS 19 'Employee Benefits': Plan Amendment, Curtailment or Settlement (issued on 7 February 2018);
- Amendments to IAS 28 'Investments in Associates and Joint Ventures': Long-term Interests in Associates and Joint Ventures (issued on 12 October 2017); and
- IFRIC 23 'Uncertainty over Income Tax Treatments' (issued on 7 June 2017).

The amendments to IFRS 9 'Financial Instruments': Prepayment Features with Negative Compensation and Modifications of Financial Liabilities (issued on 12 October 2017) were early adopted by ING Group in 2018.

Apart from the amendments to IAS 39 and IFRS 7 in relation to Interest Rate Benchmark Reform, ING Group has not early adopted any other standard, interpretation or amendment in 2019 which has been issued, but is not yet effective.

### 1.4.2 Upcoming changes in IFRS after 2019
The following published amendments are not mandatory for 2019 and have not been early adopted by ING Group. ING Group is still currently assessing the detailed impact of these amendments, however the implementation of these amendments is expected to have no significant impact on ING Group's Consolidated financial statements.

The list of upcoming changes to IFRS, which are applicable for ING Group:
Effective in 2020 (* - endorsed by the EU, the rest not yet endorsed by the EU):
- Amendments to IFRS 3 'Business Combinations': Definition of a Business (issued on 22 October 2018);
- Amendments to IAS 1 and IAS 8: 'Definition of Material' (issued on 31 October 2018)*; and
- Amendments to References to the Conceptual Framework in IFRS Standards (issued on 29 March 2018)*.

Effective in 2022 (not yet endorsed by the EU):
- Amendments to IAS 1 'Presentation of Financial Statements': Classification of Liabilities as Current or Non-current (issued on 23 January 2020).

The IASB has also issued IFRS 17 'Insurance Contracts'. The original effective date of IFRS 17 was 1 January 2021, but in June 2019 the IASB has published an Exposure Draft proposing 1 January 2022 as the new effective date. ING Group is currently assessing the detailed impact of IFRS 17.

### 1.4.3 Changes to accounting policies in 2019
#### IFRS 16 'Leases'
IFRS 16 'Leases' was issued by the IASB in January 2016 and endorsed by the EU in October 2017. IFRS 16 replaces IAS 17 'Leases', IFRIC 4 'Determining whether an Arrangement contains a Lease',

SIC-15 'Operating Leases- Incentives' and SIC-27 'Evaluating the Substance of Transactions Involving the Legal Form of a Lease'. ING Group has adopted IFRS 16 retrospectively from 1 January 2019, but has not restated comparatives for the 2018 and 2017 reporting periods, as permitted under the specific transitional provisions in the Standard, the so-called 'modified retrospective approach'. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening statement of financial position on 1 January 2019.

## IFRS 16 'Leases' – Impact of adoption

### Transition

For lessee accounting, the new Standard removes the distinction between operating and finance leases. All leases are recognised on the statement of financial position with exemptions for short-term leases with a lease term of less than 12 months and leases of low-value assets (for example mobile phones or laptops).

There is no significant impact of the adoption of IFRS 16 on ING Group's Net Result, Comprehensive income and Shareholders' equity on transition. This follows ING Group's implementation decision where the value of the right-of-use asset is based on the value of the lease liability, adjusted for any previously recognised prepaid and/or accrued lease payments on that lease contract, as is permitted under the Standard.

On transition to IFRS 16, ING Group recognised lease liabilities of EUR 1,301 million and right-of-use assets of EUR 1,279 million equal to the lease liability adjusted for any previously recognised prepaid or accrued lease payments on that lease.

The weighted average incremental borrowing rate applied to lease liabilities recognised in the statement of financial position at the date of initial application is 2.47%.

The following table reconciles the future rental commitments for operating lease contracts under IAS 17 to the lease liability under IFRS 16 on transition to IFRS 16 as of 1 January 2019:

| | 1 January 2019 |
|---|---|
| **Future rental commitments for operating lease contract disclosed under IAS 17 as at 31 December 2018** | 1,378 |
| (Less) discounting effect using ING's incremental borrowing rate at 1-1-2019 | -108 |
| (Less) recognition exemption for short-term leases | -16 |
| (Less) recognition exemption for low value assets | -3 |
| (Less) non-lease components of a contract | -78 |
| Add extension and termination options reasonably certain to be exercised | 143 |
| (Less) variable lease payments based on an index or a rate | -15 |
| **Lease liability recognised under IFRS 16 at 1 January 2019** | **1,301** |

In applying IFRS 16 for the first time, ING Group has used the following practical expedients permitted by the Standard:

- Reliance on previous assessments whether a contract is, or contains a lease at the date of initial application;
- The use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Reliance on previous assessments on whether leases are onerous;
- The accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases;
- The exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application; and
- The use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

### IFRS 16 'Leases' - Accounting policies applied from 1 January 2019

**ING Group as the lessee**

A lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a corresponding liability representing its obligation to make lease payments at the date at which the leased asset is available for use by ING Group. Each lease payment is allocated between the repayment of the liability and finance cost. The finance costs are charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- Variable lease payments that are based on an index or a rate;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions. This rate is approximated by using the risk free rate applicable to the lease term, the currency of the lease payment and jurisdiction, with the Fund Transfer Pricing (FTP) rate as an add-on. The FTP rate is used to transfer interest rate risk and funding and liquidity risk positions between the ING Group business and treasury departments. It is determined by either ING Group or Local Asset and Liability Committee (ALCO).

Right-of-use assets are measured at cost comprising the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date less any lease incentives received and any initial direct costs and restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise mainly IT-equipment (for example mobile phones or laptops) and small items of office furniture.

The right-of-use asset is included in the statement of financial position line-item 'Property and equipment', the lease liability is included in the statement of financial position line-item 'Other liabilities'. Refer to Note 9 'Property and equipment' and Note 17 'Other liabilities'.

Subsequently, the right-of-use asset will amortise using a straight-line method to the income statement over the life of the lease. The lease liability will subsequently increase for the accrual of interest and decrease when payments are made. Any remeasurement of the lease liability due to a lease modification or other reassessment result in a corresponding adjustment to the carrying amount of the right-of-use asset.

**ING Group as the lessor**

When ING Group acts as a lessor, a distinction should be made between finance leases and operating leases. For ING Group as a lessor these are mainly finance leases. The present value of the lease payments is recognised as a receivable under Loans and advances to customers or Loans and advances to banks. The difference between the gross receivable and the present value of the receivable is unearned finance lease income. Lease income is recognised over the term of the lease using the net investment method (before tax), which reflects a constant periodic rate of return.

### Operating leases for lessees prior to 1 January 2019 under IAS 17

The comparative figures presented are accounted for using the previous Standard, IAS 17 'Leases'. Under this Standard a distinction was made between finance leases and operating leases. A lease was considered a finance lease if it transfers substantially all risks and rewards of the ownership of the asset. All other leases are operating leases.

Leases entered into by ING Group as a lessee were primarily operating leases. The total payments under operating leases were recognised in the statement of profit or loss on a straight-line basis over the period of the lease.

## 1.5 Significant judgements and critical accounting estimates and assumptions

The preparation of the consolidated financial statements requires management to make judgements in the process of applying its accounting policies and to use estimates and assumptions. The estimates and assumptions affect the reported amounts of the assets and liabilities and the amounts of the contingent assets and contingent liabilities at the balance sheet date, as well as reported income and expenses for the year. The actual outcome may differ from these estimates. The process of setting assumptions is subject to internal control procedures and approvals.

ING Group has identified areas that require management to make significant judgements and use critical accounting estimates and assumptions based on the information and financial data that may change in future periods. These areas are:

- The determination of the fair values of financial assets and liabilities;
- Loan loss provisions; and
- Provisions.

For further discussion of the significant judgements and critical accounting estimates and assumptions in these areas, reference is made to the relevant parts in paragraph 1.6 'Financial instruments', 1.17 'Provisions, contingent liabilities and contingent assets' of Note 1 and the applicable notes to the Consolidated financial statements.

## 1.6 Financial instruments

### 1.6.1 Recognition and derecognition of financial instruments

**Recognition of financial assets**

Financial assets are recognised in the balance sheet when ING becomes a party to the contractual provisions of the instrument. For a regular way purchase or sale of a financial asset, trade date and settlement date accounting is applied depending on the classification of the financial asset.

**Derecognition of financial assets**

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or where ING Group has transferred substantially all risks and rewards of ownership. If ING Group neither transfers nor retains substantially all the risks and rewards of ownership of a financial asset, it derecognises the financial asset if it no longer has control over the asset. The difference between the carrying amount of a financial asset that has been extinguished and the consideration received is recognised in profit or loss.

**Recognition of financial liabilities**

Financial liabilities are recognised on the date that the entity becomes a party to the contractual provisions of the instrument.

**Derecognition of financial liabilities**

Financial liabilities are derecognised when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished and the consideration paid is recognised in profit or loss.

### 1.6.2 Classification and measurement of financial instruments

**Financial assets**

ING Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI, or through profit or loss); and

- those to be measured at amortised cost (AC).

At initial recognition, ING Group measures a financial asset at its fair value plus, in the case of a financial asset not at FVPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss (FVPL) are expensed in the statement of profit or loss.

**Financial assets - Debt instruments**
The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows at initial recognition.

*Business models*
Business models are classified as Hold to Collect (HtC), Hold to Collect and Sell (HtC&S) or Other depending on how a portfolio of financial instruments as a whole is managed. ING Group's business models are based on the existing management structure of the bank, and refined based on an analysis of how businesses are evaluated and reported, how their specific business risks are managed and on historic and expected future sales. Sales are permissible in a HtC business model when these are due to an increase in credit risk, take place close to the maturity date (where the proceeds from the sales approximate the collection of the remaining contractual cash flows), are insignificant in value (both individually and in aggregate) or are infrequent.

*Contractual cash flows Solely Payments of Principal and Interest (SPPI)*
The contractual cash flows of a financial asset are assessed to determine whether they represent SPPI. Interest includes consideration for the time value of money, credit risk and also consideration for liquidity risk and costs associated with holding the financial asset for a particular period of time. In addition, interest can include a profit margin that is consistent with a basic lending arrangement. Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are SPPI.

In assessing whether the contractual cash flows are SPPI, ING Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making the assessment, terms such as the following are considered, with an example of an SPPI failure for each consideration:
- prepayment terms. For example a prepayment of an outstanding principal amount plus a penalty which is not capped to three or six months of interest;
- leverage features, which increase the variability of the contractual cash flows with the result that they do not have the economic characteristics of interest. An example is a Libor contract with a multiplier;
- terms that limit ING Group's claim to cash flows from specified assets - e.g. non-recourse asset arrangements. This could be the case if payments of principal and interest are met solely by the cash flows generated by the underlying asset, for example instances in real estate, shipping and aviation financing; and
- features that modify consideration of the time value of money. These are contracts with for example an interest rate which is reset every month to a one-year rate. ING Group performs either a qualitative or quantitative benchmark test on a financial asset with a modified time value of money element. A qualitative test is performed when it is clear with little or no analysis whether the contractual cash flows solely represent SPPI.

Based on the entity's business model for managing the financial assets and the contractual terms of the cash flows, there are three measurement categories into which ING Group classifies its debt instruments:
- Amortised Cost (AC):
  Debt instruments that are held for collection of contractual cash flows under a HtC business model where those cash flows represent SPPI are measured at AC. Interest income from these financial assets is included in Interest income using the EIR method. Any gain or loss arising on derecognition is recognised directly in profit or loss. Impairment losses are presented as a separate line item in the Consolidated statement of profit or loss.
- FVOCI:

Debt instruments that are held for collection of contractual cash flows and for selling the financial assets under a HtC&S business model, where the assets' cash flows represent SPPI, are measured at FVOCI. Movements in the carrying amount are recognised in OCI, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and presented in Investment income or Other income, based on the specific characteristics of the business model. Interest income from these financial assets is included in Interest income using the EIR method. Impairment losses are presented as a separate line item in the Consolidated statement of profit or loss.

- FVPL:
  Debt instruments that do not meet the criteria for AC or FVOCI are measured at FVPL. This includes debt instruments that are held-for-trading (presented separately as Trading assets) and all other debt instruments that do not meet the criteria for AC or FVOCI (presented separately as Mandatorily at FVPL). ING Group may in some cases, on initial recognition, irrevocably designate a financial asset as classified and measured at FVPL. This is the case where doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise on assets measured at AC or FVOCI. Fair value movements on trading securities, trading loans and deposits (mainly reverse repo's) are presented fully within valuation result and net trading income, this also includes interest. The interest arising on financial assets designated as at FVPL is recognised in profit or loss and presented within Interest income or Interest expense in the period in which it arises. The interest arising on a debt instrument that is part of a hedge relationship, but not subject to hedge accounting, is recognised in profit or loss and presented within Interest income or Interest expense in the period in which it arises.

ING Group reclassifies debt investments when, and only when, its business model for managing those assets changes. Such changes in business models are expected to be very infrequent. There have been no reclassifications during the reporting period.

**Financial assets - Equity instruments**
All equity investments are measured at fair value. ING Group applies the fair value through OCI option to investments which are considered strategic, consisting of investments that add value to ING Group's core banking activities.

There is no subsequent recycling of fair value gains and losses to profit or loss following the derecognition of investments if elected to be classified and measured as FVOCI. Dividends from such investments continue to be recognised in profit or loss as Investment income when ING Group's right to receive payments is established. Impairment requirements are not applicable to equity investments classified and measured as FVOCI.

Other remaining equity investments are measured at FVPL. All changes in the fair value are recognised in Valuation result and Net trading income in the Consolidated statement of profit or loss.

**Financial liabilities**
Financial liabilities are classified and subsequently measured at AC, except for financial guarantee contracts, derivatives and liabilities designated at FVPL. Financial liabilities classified and measured at FVPL are presented as follows:

- the amount of change in the fair value that is attributable to changes in own credit risk of the liability designated at FVPL is presented in OCI. Upon derecognition this Debit Valuation Adjustment (DVA) impact does not recycle from OCI to profit or loss; and
- the remaining amount of change in the fair value is presented in profit or loss in 'Valuation results and net trading income'. Interest on financial liabilities at FVPL is also recognised in the valuation result, except for items voluntarily designated as FVPL for which interest is presented within 'Other interest income (expense).

A financial guarantee contract is a contract that requires ING Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Such a contract is initially recognised at fair value and is subsequently measured at the higher of (a) the amount determined in accordance with impairment provisions of IFRS 9 (see section 'Impairment of financial assets') and (b) the amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with the revenue recognition principle of IFRS 15.

### 1.6.3 Fair values of financial assets and liabilities

All financial assets and liabilities are recognised initially at fair value. Subsequently, except for financial assets and financial liabilities measured at amortised cost, all the other financial assets and liabilities are measured at fair value.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It assumes that market participants would use and take into account the characteristics of the asset or liability when pricing the asset or liability. Fair values of financial assets and liabilities are based on unadjusted quoted market prices where available. Such quoted market prices are primarily obtained from exchange prices for listed financial instruments. Where an exchange price is not available, quoted prices in an active market may be obtained from independent market vendors, brokers, or market makers. In general, positions are valued at the bid price for a long position and at the offer price for a short position or are valued at the price within the bid-offer spread that is most representative of fair value in the circumstances. In some cases where positions are marked at mid-market prices, a fair value adjustment is calculated.

For certain financial assets and liabilities, quoted market prices are not available. For such instruments, fair value is determined using valuation techniques. These range from discounting of cash flows to various valuation models, where relevant pricing factors including the market price of underlying reference instruments, market parameters (volatilities, correlations and credit ratings), and customer behaviour are taken into account. ING maximises the use of market observable inputs and minimises the use of unobservable inputs in determining the fair value. It can be subjective dependent on the significance of the unobservable input to the overall valuation. All valuation techniques used are subject to internal review and approval. Most data used in these valuation techniques are validated on a daily basis when possible.

When a group of financial assets and liabilities are managed on the basis of their net risk exposures, the fair value of a group of financial assets and liabilities are measured on a net portfolio level.

To include credit risk in fair value, ING applies both Credit and Debit Valuation Adjustments (CVA, DVA). Own issued debt and structured notes that are designated as measured at FVPL are adjusted for credit risk by means of a DVA. Additionally, derivatives valued at fair value are adjusted for credit risk by a CVA. The CVA is of a bilateral nature as both the credit risk on the counterparty as well as the credit risk on ING are included in the adjustment. All input data that is used in the determination of the CVA is based on market implied data. Additionally, wrong-way risk (when exposure to a counterparty is increasing and the credit quality of that counterparty deteriorates) and right-way risk (when exposure to a counterparty is increasing and the credit quality of that counterparty improves) are taken into account in the measurement of the valuation adjustment. ING applies an additional 'Funding Valuation Adjustment' (FVA) to the uncollateralised derivatives based on the market price of funding liquidity.

**Significant judgements and critical accounting estimates and assumptions:**
Even if market prices are available, when markets are less liquid there may be a range of prices for the same security from different price sources. Selecting the most appropriate price requires judgement and could result in different estimates of fair value.

Valuation techniques are subjective in nature and significant judgement is involved in establishing fair values for certain financial assets and liabilities. Valuation techniques involve various assumptions regarding pricing factors. The use of different valuation techniques and assumptions could produce significantly different estimates of fair value.

Price testing is performed to assess whether the process of valuation has led to an appropriate fair value of the position and to an appropriate reflection of these valuations in the statement of profit or loss. Price testing is performed to minimise the potential risks for economic losses due to incorrect or misused models.

Reference is made to Note 38 'Fair value of assets and liabilities' and Market risk paragraph in the 'Risk management' section of the Annual Report for the basis of the determination of the fair value of financial instruments and related sensitivities.

### 1.6.4 Credit risk management classification and maximum credit risk exposure

Credit risk management disclosures are provided in the Credit risk paragraph 'Credit risk categories' of the 'Risk management' section in the Annual Report.

The maximum credit risk exposure for items in the statement of financial position is generally the carrying value for the relevant financial assets. For the off-balance sheet items the maximum credit exposure is the maximum amount that could be required to be paid. Reference is made to Note 45 'Contingent liabilities and commitments' for these off-balance sheet items. Collateral received is not taken into account when determining the maximum credit risk exposure.

The manner in which ING Group manages credit risk' and determines credit risk exposures for that purpose is explained in the Credit risk paragraph 'Credit Risk Appetite and Concentration Risk Framework' of the 'Risk management' section in the Annual Report.

### 1.6.5 Derivatives and hedge accounting

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently measured at fair value. Fair values are obtained from quoted market prices in active markets, including market transactions and valuation techniques (such as discounted cash flow models and option pricing models), as appropriate. All derivatives are carried as assets when their fair value is positive and as liabilities when their fair value is negative. Fair value movements on derivatives are presented in profit or loss in Valuation result and net trading income, except for derivatives in either a formal hedge relationship and so-called economic hedges that are not in a formal hedge accounting relationship where a component is presented separately in interest result in line with ING's risk management strategy.

Embedded derivatives are separated from financial liabilities and other non-financial contracts and accounted for as a derivative if, and only if:
a) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract;
b) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
c) the combined instrument is not measured at fair value with changes in fair value reported in profit or loss.

If an embedded derivative is separated, the host contract is accounted for as a similar free-standing contract.

The method of recognising the resulting fair value gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as hedges of the fair value of recognised assets or liabilities or firm commitments (fair value hedge), hedges of highly probable future cash flows attributable to a recognised asset or liability or a forecast transaction (cash flow hedge), or hedges of a net investment in a foreign operation. Hedge accounting is used for derivatives designated in this way provided certain criteria are met.

At the inception of the transaction ING Group documents the relationship between hedging instruments and hedged items, its risk management objective, together with the methods selected to assess hedge effectiveness. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items.

ING Group applies fair value hedge accounting to portfolio hedges of interest rate risk (macro hedging) under the EU carve-out. The EU carve-out macro hedging enables a group of derivatives (or proportions) to be viewed in combination and jointly designated as the hedging instrument and removes some of the limitations in fair value hedge accounting. ING Group applies fair value hedge accounting for portfolio hedges of interest rate risk (macro hedging) under the EU carve-out to its retail operations. The net exposures of retail funding (savings and current accounts) and retail lending (mortgages) are hedged. The hedging activities are designated under a portfolio fair value hedge on the mortgages. Changes in the fair value of the derivatives are recognised in the statement of profit or loss, together with the fair value adjustment on the mortgages (hedged items) insofar as attributable to interest rate risk (the hedged risk).

ING Group also applies macro cash flow hedge accounting to hedge the variability in future cash flows of non-trading assets and liabilities due to the interest rate risk and foreign currency exchange rate risk. The designated hedged items are floating rated assets or liabilities, such as floating rate mortgages and corporate loans. The effective portion of changes in the fair value of the derivatives are recognised in the Other Comprehensive Income.

**Fair value hedges**
Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in the statement of profit or loss, together with fair value adjustments to the hedged item attributable to the hedged risk. If the hedge relationship no longer meets the criteria for hedge accounting, the cumulative adjustment of the hedged item is, in the case of interest bearing instruments, amortised through the statement of profit or loss over the remaining term of the original hedge or recognised directly when the hedged item is derecognised. For non-interest bearing instruments, the cumulative adjustment of the hedged item is recognised in the statement of profit or loss only when the hedged item is derecognised.

**Cash flow hedges**
The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in the Other Comprehensive Income. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit or loss. Amounts accumulated in the Other Comprehensive Income are recycled to the statement of profit or loss in the periods in which the hedged item affects net result. When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the Other Comprehensive Income at that time remains in the Other Comprehensive Income and is recognised when the forecast transaction is ultimately recognised in the statement of profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in the Other Comprehensive Income is transferred immediately to the statement of profit or loss.

**Net investment hedges**
Hedges of net investments in foreign operations are accounted for in a similar way to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in the Other Comprehensive Income and the gain or loss relating to the ineffective portion is recognised immediately in the statement of profit or loss. Gains and losses accumulated in the Other Comprehensive Income are included in the statement of profit or loss when the foreign operation is disposed.

**Specific policies applicable from 1 January 2019 for hedges directly affected by IBOR reform**
ING Group early adopts the amendments as described in paragraph 1.4.1 'Changes in IFRS effective in 2019' of Note 1. The amendments provide temporary reliefs which enable hedge accounting to continue during the period of uncertainty before the replacement of an existing interest rate benchmark with an alternative nearly risk-free interest rate (an 'RFR'). The following temporary reliefs are part of the amendment:

- Highly probable requirement for cash flow hedges
  When determining whether a forecast transaction is highly probable, it is assumed that the interest rate benchmark on which the hedged cash flows are based is not altered as a result of the reform.
- Prospective assessment of hedge effectiveness

When performing the prospective assessment it is assumed that the interest rate benchmark on which the hedged cash flows are based is not altered as a result of the reform.

- Retrospective assessment of hedge effectiveness
  When performing the retrospective assessment hedges are allowed to pass the assessment even if actual results are outside the 80-125% range, during the period of uncertainty arising from the IBOR reform.
- Designation of a component of an item as a hedged item
  For hedges of the benchmark component of interest rate risk affected by the reform, the separately identifiable requirement only needs to be demonstrated at the inception of such hedging relationships (including macro hedges).

The amendments are relevant given that ING Group hedges and applies hedge accounting to benchmark interest rate exposure part of IBOR reform. Hedging instruments and hedged items continue to be indexed by the IBOR benchmark rates. Therefore, there is uncertainty over the timing and the amount of the replacement rate cash flows. ING Group will cease to apply the amendments when this uncertainty is no longer present or when the hedging relationship is discontinued.

**Non-trading derivatives that do not qualify for hedge accounting**
Derivative instruments that are used by the Group as part of its risk management strategies, but which do not qualify for hedge accounting under ING Group's accounting policies, are presented as non-trading derivatives. Non-trading derivatives are measured at fair value with changes in the fair value taken to the statement of profit or loss.

### 1.6.6 Offsetting of financial assets and financial liabilities
Financial assets and financial liabilities are offset, and the net amount reported, in the statement of financial position when the Group has a current legally enforceable right to set off the recognised amounts and intends to either settle on a net basis or to realise the asset and settle the liability simultaneously. Offsetting is applied to certain interest rate swaps for which the services of a central clearing house are used.

### 1.6.7 Repurchase transactions and reverse repurchase transactions
Securities sold subject to repurchase agreements (repos), securities lending and similar agreements continue to be recognised in the consolidated statement of financial position. The counterparty liability is measured at FVPL (designated) and included in Other financial liabilities at FVPL if the asset is measured at FVPL. Otherwise, the counterparty liability is included in Deposits from banks, Customer deposits, or Trading, as appropriate.

Securities purchased under agreements to resell (reverse repos), securities borrowings and similar agreements are not recognised in the consolidated statement of financial position. The consideration paid to purchase securities is recognised as Loans and advances to customers, Loans and advances to banks, Other financial assets at FVPL or Trading assets, as appropriate. The difference between the sale and repurchase price is treated as interest and amortised over the life of the agreement using the effective interest method for instruments that are not measured at FVPL.

### 1.6.8 Impairment of financial assets (IFRS 9)
An ECL model is applied to on-balance sheet financial assets accounted for at AC and FVOCI such as loans, debt securities and lease receivables, as well as off-balance sheet items such as undrawn loan commitments, certain financial guarantees, and undrawn committed revolving credit facilities. Under the ECL model ING Group calculates the allowance for credit losses (loan loss provision, LLP) by considering on a discounted basis the cash shortfalls it would incur in various default scenarios for prescribed future periods and multiplying the shortfalls by the probability of each scenario occurring. The LLP is the sum of these probability-weighted outcomes and the ECL estimates are unbiased and include supportable information about past events, current conditions, and forecasts of future economic conditions. ING Group's approach leverages the existing regulatory capital models that use the Advanced Internal Ratings Based (AIRB) models for regulatory purposes.

**Three stage approach**

Financial assets are classified in any of the below 3 Stages at each reporting date. A financial asset can move between Stages during its lifetime. The Stages are based on changes in credit quality since initial recognition and defined as follows:

- Stage 1: 12 month ECL
  Financial assets that have not had a significant increase in credit risk since initial recognition (i.e. no Stage 2 or 3 triggers apply). Assets are classified as stage 1 upon initial recognition (with the exception of purchased or originated credit impaired (POCI) assets) and have a provision for ECL associated with the probability of default (PD) events occurring with the next 12 months (12 months ECL). For those financial assets with a remaining maturity of less than 12 months, a PD is used that corresponds to the remaining maturity;
- Stage 2: Lifetime ECL not credit impaired
  Financial assets showing a significant increase in credit risk since initial recognition. A provision is made for the life time ECL representing losses over the life of the financial instrument (lifetime ECL); or
- Stage 3: Lifetime ECL credit impaired
  Financial instruments that are credit impaired require a life time provision.

*Significant increase in credit risk*

ING Group established a framework, incorporating quantitative and qualitative indicators, to identify and assess significant increases in credit risk (SICR). This is used to determine the appropriate ECL Staging for each financial asset.

The main determinate of SICR is a quantitative test, whereby the lifetime PD of an asset at each reporting date is compared against its lifetime PD at the date of origination or purchase. If the delta is above pre-defined absolute or relative PD thresholds, then an asset is considered to have experienced a SICR, which is a trigger for movement between Stage 1 and Stage 2. In these instances, assets will cease reporting a 12 month ECL, and instead report a lifetime ECL. Assets can also return to Stage 1 if there is sufficient evidence that there has been a significant reduction in credit risk.

ING Group relies on a number of qualitative indicators to identify and assess SICR. These include:

- Forbearance status;
- Watch List status. Loans on the Watch List are individually assessed for Stage 2 classification;
- Intensive care management;
- Substandard Internal rating; and
- Arrears status.

*Credit impaired financial assets (Stage 3)*

Financial assets are assessed for credit-impairment at each reporting date and more frequently when circumstances warrant further assessment. Evidence of credit-impairment includes arrears of over 90 days on any material credit obligation, indications that the borrower is experiencing significant financial difficulty, a breach of contract, bankruptcy or distressed restructuring.

An asset that is in stage 3 will move back to stage 2 when, as at the reporting date, it is no longer considered to be credit-impaired. The asset will migrate back to stage 1 when its credit risk at the reporting date is no longer considered to have increased significantly since initial recognition.

*Definition of default*

ING Group has aligned the definition of credit impaired under IFRS 9 (Stage 3) with the definition of default for prudential purposes. This is also the definition used for internal risk management purposes.

**Macroeconomic scenarios**

ING has established a quarterly process whereby forward-looking macroeconomics scenarios and probability weightings are developed for ECL calculation purposes. ING Group applies data predominantly from a leading service provider enriched with the internal ING Group view. A baseline, up-scenario and a down-scenario are determined to reflect an unbiased and probability-weighted ECL amount. As a baseline scenario, ING Group applies the market-neutral view combining consensus forecasts for economic variables such as unemployment rates, GDP growth, house prices, commodity prices, and short-term interest rates. Applying market consensus in the baseline scenario ensures unbiased estimates of the expected credit losses.

The alternative scenarios are based on observed forecast errors in the past, adjusted for the risks affecting the economy today and the forecast horizon. The probabilities assigned are based on the likelihoods of observing the three scenarios and are derived from confidence intervals on a probability distribution. The forecasts for the economic variables are adjusted on a quarterly basis.

**Measurement of ECL**

ING Group applies a collective assessment method to measure ECL for performing (Stage 1), under-performing (Stage 2), and certain non-performing (Stage 3) assets. Other non-performing assets subject to ECL measurement apply the individual assessment method, and are all in Stage 3.

*Collectively assessed assets (Stages 1 to 3)*

This is a model-based approach that calculates ECL in a formula that is expressed simplistically as PD x EAD x LGD, adjusted for the time value of money. Assets that are collectively assessed are grouped on the basis of similar credit risk characteristics, taking into account loan type, industry, geographic location, collateral type, past due status and other relevant factors. These characteristics are relevant to the estimation of future cash flows for groups of such assets by being indicative of the debtors' ability to pay all amounts due according to the contractual terms of the assets being evaluated.

For Stage 3 assets the PD equals 100% and the LGD and EAD represent a lifetime view of the losses based on characteristics of defaulted facilities.

To build the IFRS 9 models, ING Group's expected loss models (PD, LGD, EAD) used for regulatory and capital purposes have been adjusted by removing embedded prudential conservatism (such as floors) and converted through-the-cycle estimates to point-in-time estimates to support the calculation of collective-assessment ECL under IFRS 9. The models assess ECL on the basis of forward-looking macroeconomic forecasts and other inputs. For most financial assets, the expected life is limited to the remaining maturity. For overdrafts and certain revolving credit facilities, such as credit cards, the maturity is estimated based on historical data as these do not have a fixed term or repayment schedule.

*Individually assessed assets (Stage 3)*

ING Group estimates individual impairment provisions for individually significant credit impaired financial assets within Stage 3. Individual provisions are calculated using the discounted expected future cash flow method. To determine expected future cash flows, one or more scenarios are used. Each scenario is analysed based on the probability of occurrence and including forward looking information.

In determining the scenarios, all relevant factors impacting the future cash flows are taken into account. These include expected developments in credit quality, business and economic forecasts, and estimates of if/when recoveries will occur and taking into account ING's restructuring/recovery strategy.

The best estimate of ECL is calculated as the weighted-average of the shortfall (gross carrying amount minus discounted expected future cash flow using the original EIR) per scenario, based on best estimates of expected future cash flows. Recoveries can be from different sources including repayment of the loan, collateral recovery, asset sale etc. Cash flows from collateral and other credit enhancements are included in the measurement of the expected credit losses of the related financial asset when it is part of or integral to the contractual terms of the financial asset and the credit enhancement is not recognised separately. For the individual assessment, with granular (company or deal-specific) scenarios, specific factors can have a larger impact on the future cash flows than macroeconomic factors.

When a financial asset is credit-impaired, interest ceases to be recognised on the regular accrual basis, which accrues income based on the gross carrying amount of the asset. Rather, interest income is calculated by applying the original EIR to the AC of the asset, which is the gross carrying amount less the related loan loss provision.

*Purchased or Originated Credit Impaired (POCI) assets*
POCI assets are financial assets that are credit-impaired on initial recognition. Impairment on a POCI asset is determined based on lifetime ECL from initial recognition. POCI assets are recognised initially at an amount net of impairments and are measured at AC using a credit-adjusted effective interest rate. In subsequent periods any changes to the estimated lifetime ECL are recognised in profit or loss. Favourable changes are recognised as an impairment gain even if the lifetime ECL at the reporting date is lower than the estimated lifetime ECL at origination.

**Modifications**
In certain circumstances ING grants borrowers postponement and/or reduction of loan principal and/or interest payments for a temporary period of time to maximise collection opportunities, and if possible, avoid default, foreclosure, or repossession. When such postponement and/or reduction of loan principal and/or interest payments is executed based on credit concerns it is also referred to as forbearance (refer to the 'Risk Management' section of the Annual Report for more details). In such cases, the net present value of the postponement and/or reduction of loan and/or interest payments is taken into account in the determination of the appropriate level of impairment loss. If the forbearance results in a substantial modification of the terms of the loan, the original loan is derecognised and a new loan is recognised at its fair value at the modification date. ING Group determines whether there has been a substantial modification using both quantitative and qualitative factors.

**Write-off and debt forgiveness**
If there is no reasonable expectation of recovery and/or collectability of amounts due a write-off can occur. The following events can lead to a write-off:
- After a restructuring has been completed and there is a high improbability of recovery of part of the remaining loan exposure (including partial debt forgiveness);
- In a bankruptcy liquidation scenario;
- After divestment or sale of a credit facility at a discount;
- Upon conversion of a credit facility into equity; or
- ING Group releases a legal (monetary) claim it has on its customer.

When a loan is uncollectable, it is written off against the related loan loss provision. Subsequent recoveries of amounts previously written off are recognised in the statement of profit or loss.

Debt forgiveness (or debt settlement) involves write-off but additionally involves the forgiveness of a legal obligation, in whole or in part. This means that ING forfeits the legal right to recover the debt. As a result, the financial asset needs to be derecognised. Distinction is made in situations where ING ends the relationship with the client and situations where ING (partially) continues the financing of the client.

**Presentation of ECL**
Loss allowances for financial assets measured at AC are deducted from the gross carrying amount of the assets. For debt instruments at FVOCI, the loss allowance is recognised in OCI, instead of deducting the carrying amount of the asset. For impaired financial assets with drawn and undrawn components, ECL also reflects any credit losses related to the portion of the loan commitment that is expected to be drawn down over the remaining life of the instrument. The loss allowance on issued financial guarantee contracts, in scope of IFRS 9 and not measured at FVPL, are recognised as liabilities and presented in Other provisions. ECL are presented in profit or loss in Addition to loan loss provision.

**Significant judgements and critical accounting estimates and assumptions:**
Considerable management judgement is exercised in determining the amount of LLP for financial assets assessed on both a collective and an individual impairment basis. In particular, this judgement requires ING Group to make various assumptions about the risk of default, the subsequent expected loss rates in the event of default, and expected future cash flows. These assumptions are based on a combination of the Group's past history, existing market conditions and forward-looking estimates at the end of each reporting period. Changes in these assumptions may lead to changes in the LLP over time. Given they are subjective and complex in nature, and because the LLP and the underlying exposures subject to impairment assessment are material, these assumptions are considered critical accounting assumptions. The sensitivity of these

assumptions is assessed in the credit risk section of the 'Risk Management' section in the Annual Report.

The critical accounting estimates and assumptions are:
The use of forward-looking macroeconomic scenarios in both collective and individual impairment assessments. Forward-looking macroeconomic scenarios are subjective and uncertain in nature. The process the Group follows involves using inputs from third party provider Oxford Economics (OE), and subjecting these to internal expert review and challenge to ensure the inputs used in the models reflect ING's view on the macro economy. Two internal groups, the Macroeconomics Scenarios Team and the Macroeconomics Scenarios Expert Panel, were established for this purpose. The latter team consists of senior management representatives from the Business, Risk and Finance. The use of alternate forward-looking macroeconomic scenarios can produce significantly different estimates of ECL. This is demonstrated in the sensitivity analysis in the 'Risk Management' section of the Annual Report, where the un-weighted ECL under each of the three scenarios for some significant portfolios is disclosed.

The probability weights applied to each of the three scenarios. This is a management judgement that ultimately requires estimation and consideration of the range of possibilities. This ensures consensus view on the likelihood of each scenario materializing is appropriately reflected in the weights applied by the Group for collective assessment ECL calculations. The sensitivity analysis in the 'Risk Management' section of the Annual Report discloses these weights used.

The significant judgements are:
The criteria for identifying a significant increase in credit risk. When determining whether the credit risk on a financial asset has increased significantly, ING Group considers reasonable and supportable information available to compare the risk of default occurring at reporting date with the risk of a default occurring at initial recognition of the financial asset. Whilst judgement is required in applying each financial asset with a PD rating, there is significant judgement used in determining the stage allocation PD banding thresholds. The process of comparing a financial asset's PD with the PD banding thresholds determines its ECL stage. Assets in Stage 1 are allocated a 12 month ECL, and those in Stage 2 are allocated a lifetime ECL, and the difference is often significant. As such, the judgement made both in assigning financial asset PDs and in setting PD banding thresholds constitute a significant judgement. Analysis of the sensitivity associated with the assessment of significant increase in credit risk is presented in the 'Risk Management' section of the Annual Report.

The definition of default. Judgement is exercised in management's evaluation of whether there is objective evidence of impairment loss has been incurred for larger exposures. Management judgement is required in assessing evidence of credit-impairment.

## 1.7 Financial instruments prior to 1 January 2018 under IAS 39

The following is applicable to periods prior to 1 January 2018 for financial instruments accounted for under IAS 39, to the extent not already discussed earlier in this section. The 2017 comparative period was not restated for the adoption of IFRS 9.

### 1.7.1 Classification and measurement of financial assets and financial liabilities (IAS 39)

**Financial assets and liabilities designated at fair value through profit or loss**
Management will designate a financial asset or a financial liability as such only if this eliminates a measurement inconsistency, if the related assets and liabilities are managed on a fair value basis or classified as an embedded derivative as described below.

Interest income and expense from financial instruments classified at fair value through profit or loss is recognised in Interest income using the effective interest method (where applicable). The remaining changes in fair value of such instruments are recognised in Valuation results and net trading income in the statement of profit or loss. Dividend income from equity instruments classified at fair value through profit or loss is generally recognised in 'Valuation results and net trading income' in the statement of profit or loss when the dividend has been declared.

**Embedded derivatives**
Certain derivatives embedded in other contracts are measured as separate derivatives when their economic characteristics and risks are not closely related to those of the host contract, the host contract is not carried at fair value through profit or loss, and if a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative. These embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. An assessment is carried out when ING Group first becomes party to the contract. A reassessment is carried out only when there is a change in the terms of the contract that significantly modifies the expected cash flows.

**Investments**
Investments (including loans quoted in active markets) are classified either as held-to-maturity or available-for-sale. Investment debt securities and loans quoted in active markets with fixed maturity where management has both the intent and the ability to hold to maturity are classified as held-to-maturity. Investment securities and quoted loans intended to be held for an indefinite period of time, which may be sold in response to needs for liquidity or changes in interest rates, exchange rates or equity prices, are classified as available-for-sale financial assets.

*Available-for-sale financial assets*
Available-for-sale financial assets include available-for-sale debt securities and available-for-sale equity securities. Available-for-sale financial assets are initially recognised at fair value plus transaction costs. For available-for-sale debt securities, the difference between cost and redemption value is amortised. Interest income is recognised using the effective interest method. Available-for-sale financial assets are subsequently measured at fair value. Interest income from debt securities classified as available-for-sale is recognised in Interest income in the statement of profit or loss. Dividend income from equity instruments classified as available-for-sale is recognised in Investment income in the statement of profit or loss when the dividend has been declared. Unrealised gains and losses arising from changes in the fair value are recognised in equity and are recycled to the statement of profit or loss as Investment income when the asset is disposed.

Investments in prepayment sensitive securities such as Interest-Only and Principal-Only strips are generally classified as available-for-sale.

*Held-to-maturity investments*
Non-derivative financial assets with fixed or determinable payments and fixed maturity for which ING Group has the positive intent and ability to hold to maturity and which are designated by management as held-to-maturity assets are initially recognised at fair value plus transaction costs. Subsequently, they are carried at AC using the effective interest method less any impairment losses. Interest income from debt securities classified as held-to-maturity is recognised in Interest income in the statement of profit or loss using the effective interest method. Held-to-maturity investments include only debt securities.

**Loans and receivables**
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are initially recognised at fair value plus transaction costs. Subsequently, they are carried at AC using the effective interest method less any impairment losses. Loans and receivables include Cash and balances with central banks, Loans and advances to banks, Loans and advances to customers, and some categories of Other assets and are reflected in these line items in the statement of financial position. Interest income from loans and receivables is recognised in Interest income in the statement of profit or loss using the effective interest method.

**Impairments of financial assets at amortised cost (loan loss provisions) (IAS 39)**
ING Group assesses periodically and at each balance sheet date whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset, but before the balance sheet date, (a loss event) and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated. The following circumstances, among others, are considered objective evidence that a financial asset or group of assets is impaired:
- The borrower has sought or has been placed in bankruptcy or similar protection and this leads to the avoidance of or delays in repayment of the financial asset;

- The borrower has failed in the repayment of principal, interest, or fees and the payment failure has remained unsolved for a certain period;
- The borrower has demonstrated significant financial difficulty, to the extent that it will have a negative impact on the expected future cash flows of the financial asset;
- The credit obligation has been restructured for non-commercial reasons. ING Group has granted concessions, for economic or legal reasons relating to the borrower's financial difficulty, the effect of which is a reduction in the expected future cash flows of the financial asset; and
- Historical experience, updated for current events where necessary, provides evidence that a proportion of a group of assets is impaired although the related events that represent impairment triggers are not yet captured by ING Group's credit risk systems.

Losses expected as a result of future events, no matter how likely, are not recognised.
ING Group first assesses whether objective evidence of impairment (a loss event/trigger) exists individually for financial assets that are individually significant, and then individually or collectively for financial assets that are not individually significant. If ING Group determines that no objective evidence of impairment (a loss event/trigger) exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognised are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss on an asset carried at AC has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account (loan loss provision) and the amount of the loss is recognised in the statement of profit or loss under Addition to loan loss provision. If the asset has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the previously recognised impairment loss is reversed by adjusting the provision. The amount of the reversal is recognised in the statement of profit or loss.

Impairments on other debt instruments (Loans and held-to-maturity investments) are part of the loan loss provision as described above.

**Impairment of AFS assets**
At each balance sheet date, ING Group assesses whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the specific case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the assets are impaired. Significant and prolonged are interpreted on a case-by-case basis for specific equity securities; generally 25% and six months are used as triggers. If any objective evidence exists for available-for-sale debt and equity investments, the cumulative loss, measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in net result, is removed from equity and recognised in the statement of profit or loss. Impairment losses recognised on equity instruments can never be reversed. If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the statement of profit or loss, the impairment loss is reversed through the statement of profit or loss.

## 1.8 Consolidation

ING Group comprises ING Groep N.V. (the Parent Company) , ING Bank N.V. and all other subsidiaries.
Subsidiaries are entities controlled by ING Groep N.V. Control exists if ING Groep N.V. is exposed or has rights to variable returns and has the ability to affect those returns through the power over the investee. Control is usually achieved through situations including, but not limited to:

- Ownership, directly or indirectly, of more than half of the voting power;
- Ability to appoint or remove the majority of the board of directors;
- Power to govern operating and financial policies under statute or agreement; and
- Power over more than half of the voting rights through an agreement with other investors.

The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether Group controls another entity.

For interests in structured entities, the existence of control requires judgement as these entities are designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. This judgement includes, for example, the involvement in the design of the structured entity, contractual arrangements that give rights to direct the structured entities relevant activities and commitment to ensure that the structured entity operates as designed.

A list of principal subsidiaries is included in Note 48 'Principal subsidiaries'.

A list containing the information referred to in Section 379 (1), Book 2 of the Dutch Civil Code has been filed with the office of the Commercial Register of Amsterdam, in accordance with Section 379 (5), Book 2 of the Dutch Civil Code.

The results of the operations and the net assets of subsidiaries are included in the statement of profit or loss and the statement of financial position from the date control is obtained until the date control is lost. On disposal, the difference between the sales proceeds, net of directly attributable transaction costs, and the net assets is included in net result.

A subsidiary which ING Group has agreed to sell but is still legally owned by ING Group may still be controlled by Group at the balance sheet date and therefore, still be included in the consolidation. Such a subsidiary may be presented as a held for sale disposal group if certain conditions are met.

All intercompany transactions, balances and unrealised surpluses and deficits on transactions between group companies are eliminated. Where necessary, the accounting policies used by subsidiaries are changed to ensure consistency with group policies. In general, the reporting dates of subsidiaries are the same as the reporting date of ING Groep N.V.

ING Groep N.V. and its Dutch group companies are subject to legal restrictions regarding the amount of dividends they can pay to their shareholders. The Dutch Civil Code contains the restriction that dividends can only be paid up to an amount equal to the excess of the company's own funds over the sum of the paid-up capital and reserves required by law. Additionally, certain Group companies are subject to restrictions on the amount of funds they may transfer in the form of dividends, or otherwise, to the parent company.

Furthermore, in addition to the restrictions in respect of minimum capital requirements that are imposed by industry regulators in the countries in which the subsidiaries operate, other limitations exist in certain countries.

## 1.9 Segment reporting

An operating segment is a distinguishable component of the Group, engaged in providing products or services, whose operating results are regularly reviewed by the Executive Board of ING Group and the Management Board Banking (together the Chief Operating Decision Maker (CODM)) to make decisions about resources to be allocated to the segments and assess its performance. A geographical area is a distinguishable component of the Group engaged in providing products or services within a particular economic environment that is subject to risks and returns that are different from those of segments operating in other economic environments.

The CODM examines ING Group's performance both by line of business and geographic perspective and has identified five reportable segments by line of business and six by geographical area. The geographical analyses are based on the location of the office from which the transactions are originated.

## 1.10 Foreign currency translation

**Functional and presentation currency**
Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The Consolidated financial statements are presented in euros, which is Group's presentation currency.

**Transactions and balances**
Foreign currency transactions are translated into the functional currency using the exchange rate prevailing at the date of the transactions. Exchange rate differences resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of profit or loss, except when deferred in equity as part of qualifying cash flow hedges or qualifying net investment hedges.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

Exchange rate differences on non-monetary items, measured at fair value through profit or loss, are reported as part of the fair value gain or loss. Non-monetary items are retranslated at the date fair value is determined. Exchange rate differences on non-monetary items measured at fair value through the revaluation reserve are included in the revaluation reserve in equity.

Exchange rate differences in the statement of profit or loss are generally included in 'Valuation results and net trading income'. Reference is made to Note 23 'Valuation results and net trading income', which discloses the amounts included in the statement of profit or loss. Exchange rate differences relating to the disposal of debt and FVPL equity securities are considered to be an inherent part of the capital gains and losses recognised in Investment income. As mentioned below, in Group companies relating to the disposals of group companies, any exchange rate difference deferred in equity is recognised in the statement of profit or loss in 'Result on disposal of group companies'. Reference is also made to Note 20 'Equity', which discloses the amounts included in the statement of profit or loss.

### Group companies
The results and financial positions of all group companies that have a functional currency different from the presentation currency are translated into the presentation currency as follows:
- Assets and liabilities included in each statement of financial position are translated at the closing rate at the date of that statement of financial position;
- Income and expenses included in each statement of profit or loss are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- All resulting exchange rate differences are recognised in a separate component of equity.

On consolidation, exchange rate differences arising from the translation of a monetary item that forms part of the net investment in a foreign operation, and of borrowings and other instruments designated as hedges of such investments, are taken to shareholders' equity. When a foreign operation is sold, the corresponding exchange rate differences are recognised in the statement of profit or loss as part of the gain or loss on sale.

Goodwill and fair value adjustments arising from the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the exchange rate prevailing at the balance sheet date.

## 1.11 Investments in associates and joint ventures

Associates are all entities over which the Group has significant influence but not control. Significant influence is the ability to participate in the financial and operating policies of the investee. It generally results from a shareholding of between 20% and 50% of the voting rights or through situations including, but not limited to one or more of the following:

- Representation on the board of directors;
- Participation in the policymaking process; and
- Interchange of managerial personnel.

Joint ventures are entities over which the Group has joint control. Joint control is the contractually agreed sharing of control over an arrangement or entity, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Joint control means that no party to the agreement is able to act unilaterally to control the activity of the entity. The parties to the agreement must act together to control the entity and therefore exercise the joint control.

Investments in associates and joint ventures are initially recognised at cost and subsequently accounted for using the equity method of accounting.

The Group's investment in associates and joint ventures (net of any accumulated impairment loss) includes goodwill identified on acquisition. The Group's share of its associates and joint ventures post-acquisition profits or losses is recognised in the statement of profit or loss, and its share of post-acquisition changes in reserves is recognised in equity. The cumulative post-acquisition changes are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate or joint venture equals or exceeds its interest in the associate or joint venture, including any long-term interests in the associate like uncollateralised loans that are neither planned nor likely to be settled in the foreseeable future, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture.

Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated unless they provide evidence of an impairment of the asset transferred. Accounting policies of associates and joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group. The reporting dates of all significant associates and joint ventures are consistent with the reporting date of the Group.

## 1.12 Property and equipment

**Property in own use**

Land and buildings held for own use are stated at fair value at the balance sheet date. Increases in the carrying amount arising on revaluation of land and buildings held for own use are credited to the revaluation reserve in shareholders' equity. Decreases in the carrying amount that offset previous increases of the same asset are charged against the revaluation reserve directly in equity; all other decreases are charged to the statement of profit or loss. Increases that reverse a revaluation decrease on the same asset previously recognised in net result are recognised in the statement of profit or loss. Depreciation is recognised based on the fair value and the estimated useful life (in general 20–50 years). Depreciation is calculated on a straight-line basis. On disposal, the related revaluation reserve is transferred to retained earnings.
The fair values of land and buildings are based on regular appraisals done by independent qualified valuers or by internal valuers, similar to appraisals of real estate investments. Subsequent expenditure is included in the asset's carrying amount when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

**Equipment**

Equipment is stated at cost less accumulated depreciation and any impairment losses. The cost of the assets is depreciated on a straight line basis over their estimated useful lives, which are generally as follows: for data processing equipment two to five years, and four to ten years for fixtures and fittings. Expenditure incurred on maintenance and repairs is recognised in the statement of profit or loss as incurred. Expenditure incurred on major improvements is capitalised and depreciated.

**Disposals of property and equipment**
The difference between the proceeds on disposal and net carrying value is recognised in the statement of profit or loss under Other income.

## 1.13 Acquisitions, goodwill and other intangible assets

**Acquisitions and goodwill**
ING Group's acquisitions are accounted for using the acquisition method of accounting. The consideration for each acquisition is measured at the aggregate of the fair values (at the date of exchange) of assets given, liabilities incurred or assumed, and equity instruments issued in exchange for control of the acquiree. Goodwill, being the difference between the cost of the acquisition (including assumed debt) and the Group's interest in the fair value of the acquired assets, liabilities and contingent liabilities as at the date of acquisition, is capitalised as an intangible asset. Goodwill is only recognised separately on acquisitions. The results of the operations of the acquired companies are included in the statement of profit or loss from the date control is obtained.

Where applicable, the consideration for the acquisition includes any asset or liability resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value. Contingent consideration arrangements classified as an asset or a liability, are subsequently measured at fair value and the changes in fair value will be recognised in the statement of profit or loss. Changes in the fair value of the contingent consideration classified as equity, are not recognised.

Where a business combination is achieved in stages, ING Group's previously held interests in the assets and liabilities of the acquired entity are remeasured to fair value at the acquisition date (i.e. the date ING Group obtains control) and the resulting gain or loss, if any, is recognised in the statement of profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to the statement of profit or loss, where such treatment would be appropriate if that interest were disposed of. Acquisition related costs are recognised in the statement of profit or loss as incurred and presented in the statement of profit or loss as Other operating expenses.

The initial accounting for the fair value of the net assets of the companies acquired during the year may be determined only provisionally as the determination of the fair value can be complex and the time between the acquisition and the preparation of the Financial statements can be limited. The initial accounting shall be completed within a year after acquisition. Adjustments to the fair value as at the date of acquisition of acquired assets and liabilities, that are identified within one year after acquisition are recognised as an adjustment to goodwill; any subsequent adjustment is recognised as income or expense. On disposal of group companies where control is lost, the difference between the sale proceeds and carrying value (including goodwill) and the unrealised results (including the currency translation reserve in equity) is included in the statement of profit or loss.

**Goodwill impairment**
ING assesses at each reporting period, whether there is an indication that an intangible asset may be impaired. Irrespective of whether there is an indication of impairment, intangible assets with an indefinite useful life, including goodwill acquired in a business combination, and intangible assets not yet available for use, are tested annually for impairment. Goodwill is allocated to groups of CGUs (that is, the group of cash generating units or CGUs) for the purpose of impairment testing. These groups of CGUs represent the lowest level at which goodwill is monitored for internal management purposes. Goodwill is tested for impairment by comparing the carrying value of the group of CGUs to the recoverable amount of that group of CGUs. The carrying value is determined as the IFRS net asset value including goodwill. In compliance with IAS 36 'Impairment of assets', the carrying value is determined on a basis that is consistent with the way in which the recoverable amount of the CGU is determined. When the carrying values need to be allocated between Retail and Wholesale, solvency (risk-weighted assets) are used as a basis. The recoverable amount is

estimated as the higher of fair value less costs of disposal and value in use. Several methodologies are applied to arrive at the best estimate of the recoverable amount. Impairment of goodwill, if applicable, is included in the statement of profit or loss in Other operating expenses.

**Computer software**
Computer software that has been purchased or generated internally for own use is stated at cost less amortisation and any impairment losses. Amortisation is calculated on a straight-line basis over its useful life. This period will generally not exceed five years. Amortisation is included in Other operating expenses.

**Other intangible assets**
Other intangible assets are capitalised and amortised over their expected economic life, which is generally between three and ten years. Intangible assets with an indefinite life are not amortised.

## 1.14 Taxation

Income tax on the result for the year comprises current and deferred tax. Income tax is recognised in the statement of profit or loss but it is recognised directly in equity if the tax relates to items that are recognised directly in equity.

**Deferred income tax**
Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax basis of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled. Deferred tax assets and liabilities are not discounted.

Deferred tax assets are recognised where it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred income tax is provided on temporary differences arising from investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the difference will not reverse in the foreseeable future. The tax effects of income tax losses available for carry forward are recognised as an asset where it is probable that future taxable profits will be available against which these losses can be utilised.

Fair value remeasurement of debt and equity instruments measured at FVOCI and cash flow hedges, are recognised directly in equity. Deferred tax related to this fair value remeasurement is also recognised directly in equity and is subsequently recognised in the statement of profit or loss together with the deferred gain or loss.

Uncertain tax positions are assessed continually by ING Group and in case it is probable that there will be a cash outflow; a current tax liability is recognised.

## 1.15 Other assets

**Investment property**
Investment properties are recognised at fair value at the balance sheet date. Changes in the carrying amount resulting from revaluations are recognised in the statement of profit or loss. On disposal, the difference between the sale proceeds and carrying value is recognised in the statement of profit or loss.

**Property obtained from foreclosures**
Property obtained from foreclosures is stated at the lower of cost and net realisable value. Net realisable value is the estimated selling price, less applicable variable selling expenses. Property obtained from foreclosures is included in Other assets - Property development and obtained from foreclosures.

**Property development**
Property developed and under development is included in Other assets – Property development and obtained from foreclosures. Depending on the intention of ING Group after completion of the development, the property is measured as follows:
- Intention to sell: at the lower of cost and net realisable value;
- Intention to use as a real estate investment: at fair value.

## 1.16 Disposal groups held for sale and discontinued operations

Disposal groups (and groups of non-current assets) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This is only the case when the sale is highly probable and the disposal group (or group of assets) is available for immediate sale in its present condition; management must be committed to the sale, which is expected to occur within one year from the date of classification as held for sale.

Upon classification as held for sale, the disposal group is measured at the lower of its carrying amount and fair value less costs to sell, except where specifically exempt from IFRS 5. An impairment loss is recognised for any initial or subsequent write-down of the disposal group to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of the disposal group, but not in excess of any cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of the sale of the disposal group is recognised at the date of derecognition. Assets within the disposal group are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised. The assets of the disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

When a group of assets that is classified as held for sale represents a major line of business or geographical area the disposal group is classified as discontinued operations. Upon classification of a business as held for sale and discontinued operations the individual income and expenses are presented within the Total net result from discontinued operations instead of being presented in the usual line items in the Consolidated statement of profit or loss. All comparative years in the Consolidated statement of profit or loss are restated and presented as discontinued operations for all periods presented. Furthermore, the individual assets and liabilities are presented in the Consolidated statement of financial position as Assets and liabilities held for sale and are no longer included in the usual line items in the Consolidated statement of financial position. Changes in assets and liabilities as a result of classification as held for sale are included in the notes in the line 'Changes in composition of the group and other changes'.

## 1.17 Provisions, contingent liabilities and contingent assets

A provision is a present obligation arising from past events, the settlement of which is expected to result in an outflow of resources embodying economic benefits, however the timing or the amount is uncertain. Provisions are discounted when the effect of the time value of money is significant using a pre-tax discount rate.

Reorganisation provisions include employee termination benefits when the Group is demonstrably committed to either terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal, or providing termination benefits as a result of an offer made to encourage voluntary redundancy.

A liability is recognised for a levy when the activity that triggers payment, as identified by the relevant legislation, occurs. For a levy that is triggered upon reaching a minimum threshold, the liability is recognised only upon reaching the specified minimum threshold.

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of ING Group; or a present obligation that arises from past events but is not recognised because it is either not probable that an outflow of economic benefits will be

required to settle the obligation or the amount of the obligation cannot be measured reliably. Contingent liabilities are not recognised in the statement of financial position, but are rather disclosed in the notes unless the possibility of the outflow of economic benefits is remote.
A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of ING Group. Contingent assets are recognised in the statement of financial position only when realisation of the income that arises from such an asset is virtually certain. Contingent assets are disclosed in the notes when an inflow of economic benefits is probable.

**Significant judgements and critical accounting estimates and assumptions:**
The recognition and measurement of provisions is an inherently uncertain process involving using judgement to determine when a present obligation exists and estimates regarding probability, amounts and timing of cash flows.

ING Group may become involved in legal proceedings. The degree of uncertainty and the method of making the accounting estimate depends on the individual case, its nature and complexity. Legal cases are usually one of a kind. Judgement is required to estimate the probability of an unfavourable outcome and the amount of potential loss. For the assessment of litigation provisions ING Group consults with legal experts. Even taking into consideration legal experts' advice, the probability of an outflow of economic benefits can still be uncertain and the amount provisioned can remain sensitive to the assumptions used which may have a broad range of outcomes. Reference is made to Note 16 'Provisions'.

For legal proceedings where it is not possible to make a reliable estimate of the expected financial effect, that could result from the ultimate resolution of the proceedings, no provision is recognised, however disclosure is included in the financial statements. Reference is made to Note 46 'Legal proceedings'.

Critical accounting estimates and assumptions for the reorganisation provision are in estimating the amounts and timing of cash flows as the announced transformation initiatives are implemented over a period of several years. Reference is made to Note 16 'Provisions'.

## 1.18 Other liabilities

**Defined benefit plans**
The net defined benefit asset or liability recognised in the statement of financial position in respect of defined benefit pension plans is the fair value of the plan assets less the present value of the defined benefit obligation at the balance sheet date.

Plan assets are measured at fair value at the balance sheet date. For determining the pension expense, the return on plan assets is determined using a high quality corporate bond rate identical to the discount rate used in determining the defined benefit obligation.

Changes in plan assets that effect Shareholders' equity and/or Net result, include mainly:
- Return on plan assets using a high quality corporate bond rate at the start of the reporting period which are recognised as staff costs in the statement of profit or loss; and
- Remeasurements which are recognised in Other comprehensive income (equity).

The defined benefit obligation is calculated by internal and external actuaries through actuarial models and calculations using the projected unit credit method. This method considers expected future payments required to settle the obligation resulting from employee service in the current and prior periods, discounted using a high quality corporate bond rate. Inherent in these actuarial models are assumptions including discount rates, rates of increase in future salary and benefit levels, mortality rates, consumer price index and the expected level of indexation. The assumptions are based on available market data as well as management expectations and are updated regularly. The actuarial assumptions may differ significantly from the actual results due to changes in market conditions, economic and mortality trends, and other assumptions. Any changes in these assumptions could have a significant impact on the defined benefit plan obligation and future pension costs.

Changes in the defined benefit obligation that effects Shareholders' equity and/or Net result, include mainly:

- Service cost which are recognised as staff costs in the statement of profit or loss;
- Interest expenses using a high quality corporate bond rate at the start of the period which are recognised as staff costs in the Statement of profit or loss; and
- Remeasurements which are recognised in Other comprehensive income (equity).

Remeasurements recognised in other comprehensive income are not recycled to profit or loss. Any past service cost relating to a plan amendment is recognised in profit or loss in the period of the plan amendment. Gains and losses on curtailments and settlements are recognised in the statement of profit or loss when the curtailment or settlement occurs.

The recognition of a net defined benefit asset in the Consolidated statement of financial position is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

**Defined contribution plans**

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as staff expenses in the profit or loss when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

**Other post-employment obligations**

Some group companies provide other post-employment benefits to certain employees and former employees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using an accounting methodology similar to that for defined benefit pension plans.

## 1.19 Income recognition

**Interest**

Interest income and expense are recognised in the statement of profit or loss using the effective interest method. The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument (for example, prepayment options) but does not consider future credit losses.

The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts. Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

Interest results on instruments classified at Amortised Cost, assets measured at FVOCI and derivatives in a formal hedge accounting relationship is presented in 'Interest income (expense) using effective interest rate method'. Interest result on financial assets and liabilities voluntarily designated as at FVPL and derivatives in so called economic hedges and instruments designated at fair value are presented in 'Other interest income (expense)'. Interest result on all other financial assets and liabilities at FVTPL is recognised in 'Valuation results and net trading income'.

**Fees and commissions**
Fees and commissions are generally recognised as the service is provided. Loan commitment fees for loans that are likely to be drawn down are deferred (together with related direct costs) and recognised as an adjustment to the effective interest rate on the loan. Loan syndication fees are recognised as income when the syndication has been completed and the Group has retained no part of the loan package for itself or has retained a part at the same effective interest rate as the other participants. Commission and fees arising from negotiating, or participating in the negotiation of, a transaction for a third party – such as the arrangement of the acquisition of shares or other securities or the purchase or sale of businesses – are recognised on completion of the underlying transaction. Portfolio and other management advisory and service fees are recognised based on the applicable service contracts as the service is provided. Asset management fees related to investment funds and investment contract fees are recognised on a pro-rata basis over the period the service is provided. The same principle is applied for wealth management, financial planning and custody services that are continuously provided over an extended period of time. Fees received and paid between banks for payment services are classified as commission income and expenses.

**Lease income**
The proceeds from leasing out assets under operating leases are recognised on a straight-line basis over the life of the lease agreement. Lease payments received in respect of finance leases when ING Group is the lessor are divided into an interest component (recognised as interest income) and a repayment component.

## 1.20 Expense recognition

Expenses are recognised in the statement of profit or loss as incurred or when a decrease in future economic benefits related to a decrease in an asset or an increase in a liability has arisen that can be measured reliably.

Fee and commission expenses are generally a result from a contract with ING service providers in order to perform the service for ING Group's customers. Costs are generally presented as 'Commission expenses' if they are specific, incremental, directly attributable and identifiable to generate commission income.

**Share-based payments**
Share-based payment expenses are recognised as a staff expense over the vesting period. A corresponding increase in equity is recognised for equity-settled share-based payment transactions. A liability is recognised for cash-settled share-based payment transactions. The fair value of equity-settled share-based payment transactions are measured at the grant date, and the fair value of cash-settled share-based payment transactions are measured at each balance sheet date. Rights granted will remain valid until the expiry date, even if the share based payment scheme is discontinued. The rights are subject to certain conditions, including a pre-determined continuous period of service.

## 1.21 Earnings per ordinary share

Earnings per ordinary share is calculated on the basis of the weighted average number of ordinary shares outstanding. In calculating the weighted average number of ordinary shares outstanding:
- Own shares held by group companies are deducted from the total number of ordinary shares in issue;
- The computation is based on daily averages; and
- In case of exercised warrants, the exercise date is taken into consideration.

The non-voting equity securities are not ordinary shares, because their terms and conditions (especially with regard to coupons and voting rights) are significantly different. Therefore, the weighted average number of ordinary shares outstanding during the period is not impacted by the non-voting equity securities.

Diluted earnings per share data are computed as if all convertible instruments outstanding at year-end were exercised at the beginning of the period. It is also assumed that ING Group uses the assumed proceeds thus received to buy its own shares against the average market price in the financial year. The net increase in the number of shares resulting from the exercise is added to the average number of shares used to calculate diluted earnings per share.

Share options with fixed or determinable terms are treated as options in the calculation of diluted earnings per share, even though they may be contingent on vesting. They are treated as outstanding on the grant date. Performance-based employee share options are treated as contingently issuable shares because their issue is contingent upon satisfying specified conditions in addition to the passage of time.

## 1.22 Statement of cash flows

The statement of cash flows is prepared in accordance with the indirect method, classifying cash flows as cash flows from operating, investing and financing activities. In the net cash flow from operating activities, the result before tax is adjusted for those items in the statement of profit or loss and changes in items per the statement of financial position, which do not result in actual cash flows during the year.

For the purposes of the statement of cash flows, Cash and cash equivalents comprise balances with less than three months' maturity from the date of acquisition, including cash and balances with central banks, treasury bills and other eligible bills, amounts due from other banks, and deposits from banks. Investments qualify as a cash equivalent if they are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

Cash flows arising from foreign currency transactions are translated into the functional currency using the exchange rates at the date of the cash flows.

The net cash flow shown in respect of Loans and advances to customers relates only to transactions involving actual payments or receipts. The Addition to loan loss provision which is deducted from the item Loans and advances to customers in the statement of financial position has been adjusted accordingly from the result before tax and is shown separately in the statement of cash flows.

The difference between the Net cash flow in accordance with the statement of cash flows and the change between the opening and closing balance of Cash and cash equivalents in the statement of financial position is due to exchange rate differences and is presented separately in the cash flow statement.

Liabilities arising from financing activities are debt securities and subordinated loans.

## 1.23 Parent company accounts

The parent company accounts of ING Groep N.V. are prepared in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code. In accordance with subsection 8 of section 362, Book 2 of the Dutch Civil Code, the recognition and measurement principles applied in the Parent company accounts are the same as those applied in the Consolidated financial statements.

# Notes to the Consolidated statement of financial position

## 2 Cash and balances with central banks

**Cash and balances with central banks**

| | 2019 | 2018 |
|---|---|---|
| Amounts held at central banks | 51,178 | 47,655 |
| Cash and bank balances | 2,024 | 2,333 |
| | **53,202** | **49,987** |

The movement in Cash and balances with central banks reflects ING's active liquidity management. Amounts held at central banks reflect on demand balances.

Reference is made to Note 42 'Assets not freely disposable' for restrictions on Cash balances with central banks.

## 3 Loans and advances to banks

**Loans and advances to banks**

| | Netherlands | | International | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Loans | 13,641 | 7,967 | 21,499 | 22,460 | 35,140 | 30,428 |
| Cash advances, overdrafts and other balances | 0 | 1 | 4 | 3 | 5 | 3 |
| | **13,641** | **7,968** | **21,504** | **22,463** | **35,145** | **30,431** |
| | | | | | | |
| Loan loss provisions | -6 | –5 | -3 | –5 | -9 | -9 |
| | **13,635** | **7,963** | **21,501** | **22,458** | **35,136** | **30,422** |

Reference is made to Note 42 'Assets not freely disposable' for restrictions on Loans and advances to banks.

Loans include balances (mainly short-term deposits) with central banks amounting to EUR 3,185 million (2018: EUR 4,713 million).

As at 31 December 2019, Loans include receivables related to securities in reverse repurchase transactions amounting to EUR 8,943 million (2018: EUR 6,686 million) and receivables related to finance lease contracts amounting to EUR 24 million (2018: EUR 51 million). Reference is made to Note 7 'Loans and advances to customers' for information on finance lease receivables.

As at 31 December 2019, all loans and advances to banks are non-subordinated.

## 4 Financial assets at fair value through profit or loss

**Financial assets at fair value through profit or loss**

| | 2019 | 2018 |
|---|---|---|
| Trading assets | 49,254 | 50,152 |
| Non-trading derivatives | 2,257 | 2,664 |
| Designated at fair value through profit or loss | 3,076 | 2,887 |
| Mandatorily measured at fair value through profit or loss | 41,600 | 64,783 |
| | **96,187** | **120,486** |

Financial assets at fair value through profit or loss includes securities lending and sales and repurchase transactions which were not derecognised, because ING Group continues to be exposed to substantially all risks and rewards of the transferred financial asset. These assets are included in Trading assets and Financial assets mandatorily measured at fair value through profit or loss. Reference is made to Note 43 'Transfer of financial assets' for information on transferred assets which were not derecognised.

## Trading assets

**Trading assets by type**

| | 2019 | 2018 |
|---|---|---|
| Equity securities | 8,499 | 8,898 |
| Debt securities | 6,256 | 5,213 |
| Derivatives | 21,694 | 22,110 |
| Loans and receivables | 12,806 | 13,931 |
| | **49,254** | **50,152** |

Trading assets include assets that are classified under IFRS as Trading, but are closely related to servicing the needs of the clients of ING Group. ING offers institutional clients, corporate clients, and governments, products that are traded on the financial markets.
A significant part of the derivatives in the trading portfolio is related to servicing corporate clients in their risk management to hedge for example currency or interest rate exposures. In addition, ING provides its customers access to equity and debt markets for issuing their own equity or debt securities (securities underwriting). Although these are presented as Trading under IFRS, these are directly related to services to ING's customers.

Part of the trading assets are sold subject to repurchase agreements, securities lending and similar agreements comparable to collateralised lending, and continue to be recognised in the consolidated statement of financial position.
From a risk perspective, the gross amount of trading assets must be considered together with the gross amount of trading liabilities, which are presented separately on the statement of financial position since IFRS does not always allow netting of these positions in the statement of financial position.

As at 31 December 2019, Trading Assets - Loans and receivables include receivables of EUR 11,969 million (2018: EUR 12,939 million) with regard to reverse repurchase transactions.

Reference is made to Note 15 'Financial liabilities at fair value through profit or loss' for information on trading liabilities.

## Non-trading derivatives

**Non-trading derivatives by type**

| | 2019 | 2018 |
|---|---|---|
| Derivatives used in | | |
| - fair value hedges | 524 | 650 |
| - cash flow hedges | 677 | 1,012 |
| - hedges of net investments in foreign operations | 23 | 41 |
| Other non-trading derivatives | 1,033 | 961 |
| | **2,257** | **2,664** |

Reference is made to Note 39 'Derivatives and hedge accounting' for information on derivatives used in hedge accounting.

Other non-trading derivatives mainly includes interest rate swaps and foreign exchange currency swaps for which no hedge accounting is applied.

## Designated at fair value through profit or loss

**Designated at fair value through profit or loss by type**

| | 2019 | 2018 |
|---|---|---|
| Debt securities | 2,334 | 2,114 |
| Loans and receivables | 742 | 772 |
| | **3,076** | **2,887** |

'Financial assets designated at fair value through profit or loss' includes a portfolio of loans and receivables which is economically hedged by credit derivatives. The hedges do not meet the criteria for hedge accounting and the loans are recorded at fair value to avoid an accounting mismatch. The maximum credit exposure of the loans and receivables included in 'Financial assets designated at fair value through profit or loss' approximates its carrying value. The cumulative change in fair value of the loans attributable to changes in credit risk is not significant.

The notional value of the related credit derivatives is EUR 1,672 million (2018: EUR 1,364 million). The change in fair value of the credit derivatives attributable to changes in credit risk since the loans were first designated, amounts to EUR 29 million (2018: EUR -23 million) and the change for the current year amounts to EUR -52 million (2018: EUR 17 million).

The changes in fair value of the (designated) loans attributable to changes in credit risk have been calculated by determining the changes in credit spread implicit in the fair value of bonds issued by entities with similar credit characteristics.

### Mandatorily at fair value through profit or loss

**Mandatorily at fair value through profit or loss by type**

| | 2019 | 2018 |
|---|---|---|
| Equity securities | 159 | 210 |
| Debt securities | 733 | 1,103 |
| Loans and receivables | 40,708 | 63,469 |
| | **41,600** | **64,783** |

None of the equity securities are individually significant for ING Group.

For details on ING Group's total exposure to debt securities reference is made to Note 6 'Securities at amortised cost'.

As at 31 December 2019, Loans and receivables mandatorily measured at fair value through profit or loss includes EUR 38,985 million (2018: EUR 63,022 million) with regard to reverse repurchase transactions.

## 5 Financial assets at fair value through other comprehensive income

**Financial assets at fair value through other comprehensive income by type**

| | 2019 | 2018 |
|---|---|---|
| Equity securities | 2,306 | 3,228 |
| Debt securities[1] | 30,483 | 25,616 |
| Loans and advances[1] | 1,680 | 2,379 |
| | **34,468** | **31,223** |

1 Debt securities include an amount of EUR -7 million (2018: EUR -6 million) and the Loans and advances includes EUR -3 million (2018: EUR -5 million) of Loan loss provisions.

### Exposure to equity securities

**Equity securities designated as at fair value through other comprehensive income**

| | Carrying value 2019 | Dividend income 2019 | Carrying value 2018 | Dividend income 2018 |
|---|---|---|---|---|
| Investment in Bank of Beijing | 2,001 | 93 | 1,967 | 83 |
| Investment in Kotak Mahindra Bank | | | 919 | 1 |
| Other Investments | 305 | 18 | 342 | 8 |
| | **2,306** | **111** | **3,228** | **92** |

For strategic equity securities, ING decided to apply the option to irrevocably designate these investments at fair value through other comprehensive income, instead of the IFRS 9 default measurement of fair value through profit or loss.

As at 31 December 2019 ING holds approximately 13% (2018: 13%) of the shares of Bank of Beijing, a bank listed on the stock exchange of Shanghai. Following a change in regulatory requirements set by China Banking and Insurance Regulatory Commission, ING, as a shareholder holding more than 5% or more of the shares, is required to supply additional capital when necessary. No request for additional capital was received in 2019 (2018: not applicable).

The following table presents changes in financial assets at fair value through other comprehensive income.

**Changes in fair value through other comprehensive income financial assets**

| | FVOCI equity securities | | FVOCI debt instruments[1] | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance as at 1 January | 3,228 | 3,983 | 27,995 | 65,747 | 31,223 | 69,730 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | –184 | | –31,945 | | –32,129 |
| Additions | 11 | 33 | 16,259 | 10,486 | 16,270 | 10,518 |
| Amortisation | | | –12 | –12 | –12 | –12 |
| Transfers and reclassifications | 3 | 1 | –0 | 1 | 3 | 2 |
| Changes in unrealised revaluations[2] | 139 | –463 | 258 | –660 | 397 | –1,123 |
| Impairments | | | –2 | | –2 | |
| Reversals of impairments | | | 1 | 16 | 1 | 16 |
| Disposals and redemptions | –1,091 | –178 | –12,298 | –15,478 | –13,389 | –15,656 |
| Exchange rate differences | 15 | 35 | –40 | –159 | –25 | –124 |
| Changes in the composition of the group and other changes | | | 2 | 1 | 3 | 1 |
| Closing balance | **2,306** | **3,228** | **32,163** | **27,995** | **34,468** | **31,223** |

1 Fair value through other comprehensive income debt instruments includes both debt securities and loans and advances.
2 Changes in unrealised revaluations include changes on hedged items which are recognised in the statement of profit or loss.

Following a partial divestment in the fourth quarter of 2018, ING sold its last tranche of shares in India's Kotak Mahindra Bank (Kotak) in the first quarter of 2019 for EUR 880 million. The transaction, for a stake of 3.07%, concluded the divestment process and was the main driver for the increase in the 'disposal' line.
Reference is made to Note 6 'Securities at amortised cost' for details on ING Group's total exposure to debt securities.

## 6 Securities at amortised cost

Securities at amortised cost fully consists of debt securities.

ING Group's total exposure to debt securities is included in the following lines in the statement of financial position:

**Exposure to debt securities**

| | 2019 | 2018 |
|---|---|---|
| Debt securities at fair value through other comprehensive income | 30,483 | 25,616 |
| Debt securities at amortised cost | 46,108 | 47,276 |
| Debt securities at fair value through other comprehensive income and amortised cost | **76,592** | **72,893** |
| | | |
| Trading assets | 6,256 | 5,213 |
| Debt securities at fair value through profit or loss | 3,067 | 3,218 |
| Total debt securities at fair value through profit or loss | **9,323** | **8,431** |
| | **85,914** | **81,323** |

ING Group's total exposure to debt securities (excluding debt securities held in the trading portfolio) of EUR 79,659 million (31 December 2018: EUR 76,111 million) is specified as follows:

**Debt securities by type of exposure**

| | Debt Securities at FVPL | | Debt securities at FVOCI | | Debt securities at AC | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Government bonds | 408 | 142 | 20,300 | 15,580 | 25,627 | 24,659 | 46,334 | 40,381 |
| Sub-sovereign, Supranationals and Agencies | 505 | 467 | 6,606 | 5,928 | 10,689 | 11,244 | 17,801 | 17,639 |
| Covered bonds | | | 1,734 | 2,245 | 6,960 | 6,722 | 8,693 | 8,967 |
| Corporate bonds | | 23 | 476 | 485 | 143 | 765 | 619 | 1,273 |
| Financial institutions' bonds | 1,440 | 1,527 | 332 | 460 | 1,536 | 2,415 | 3,308 | 4,402 |
| ABS portfolio | 714 | 1,059 | 1,043 | 924 | 1,163 | 1,483 | 2,920 | 3,466 |
| | **3,067** | **3,218** | **30,491** | **25,622** | **46,118** | **47,288** | **79,676** | **76,128** |
| Loan loss provisions | | | –7 | –6 | –10 | –11 | –17 | –17 |
| Bond portfolio | **3,067** | **3,218** | **30,483** | **25,616** | **46,108** | **47,276** | **79,659** | **76,111** |

Approximately 90% (2018: 99%) of the exposure in the ABS portfolio is externally rated AAA, AA or A. There are no borrowed debt securities recognised in the statement of financial position.

## 7 Loans and advances to customers

### Loans and advances to customers by type

| | Netherlands | | International | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Loans to, or guaranteed by, public authorities | 25,340 | 24,547 | 16,849 | 17,257 | 42,190 | 41,803 |
| Loans secured by mortgages | 119,679 | 119,939 | 232,583 | 219,983 | 352,262 | 339,922 |
| Loans guaranteed by credit institutions | 206 | 195 | 3,569 | 2,901 | 3,775 | 3,095 |
| Personal lending | 3,482 | 3,304 | 24,768 | 21,563 | 28,250 | 24,867 |
| Corporate loans | 39,645 | 37,213 | 150,233 | 149,787 | 189,878 | 187,000 |
| | **188,352** | **185,197** | **428,003** | **411,490** | **616,355** | **596,687** |
| | | | | | | |
| Loan loss provisions | –1,193 | –1,480 | –3,398 | –3,011 | –4,590 | –4,491 |
| | **187,160** | **183,717** | **424,605** | **408,479** | **611,765** | **592,196** |

As at 31 December 2019, Loans and advances to customers – corporate loans include receivables with regard to securities which have been acquired in reverse repurchase transactions amounting to EUR 180 million (2018: EUR 266 million).

### Loans and advances to customers by subordination

| | 2019 | 2018 |
|---|---|---|
| Non-subordinated | 611,644 | 592,076 |
| Subordinated | 121 | 120 |
| | **611,765** | **592,196** |

No individual loan or advance has terms and conditions that significantly affect the amount, timing or certainty of the consolidated cash flows of the Group.

Loans and advances to customers and Loans and advances to banks include finance lease receivables and are detailed as follows:

### Finance lease receivables

| | 2019 | 2018 |
|---|---|---|
| Maturities of gross investment in finance lease receivables | | |
| - within 1 year | 3,116 | 2,374 |
| - between 1-2 years | 3,811 | n/a |
| - between 2-3 years | 2,145 | n/a |
| - between 3-4 years | 717 | n/a |
| - between 4-5 years | 367 | n/a |
| - more than 1 year but less than 5 years | n/a | 5,959 |
| - more than 5 years | 434 | 1,646 |
| | **10,591** | **9,979** |
| | | |
| Unearned future finance income on finance leases | –580 | –673 |
| Net investment in finance leases | **10,011** | **9,306** |
| | | |
| Included in Loans and advances to banks | 24 | 51 |
| Included in Loans and advances to customers | 9,987 | 9,256 |
| | **10,011** | **9,306** |

The finance lease receivables mainly relate to the financing of equipment and to a lesser extent real estate for third parties, where ING is the lessor. The finance lease receivables are part of corporate loans. Interest income in 2019 on Finance lease receivables amounts to EUR 251 million (2018: EUR 269 million).

Expected credit losses for uncollectable finance lease receivables of EUR 136 million as at 31 December 2019 (2018: EUR 150 million) is included in the loan loss provision. The loan loss provision for finance lease receivables is classified into the following loan loss provision stages; stage 1: EUR 2 million (2018: EUR 5 million), stage 2: EUR 6 million (2018: EUR 11 million), and stage 3: EUR 128 million (2018: EUR 134 million).

No individual finance lease receivable has terms and conditions that significantly affect the amount, timing or certainty of the consolidated cash flows of the Group.

# 8 Investments in associates and joint ventures

**Investments in associates and joint ventures**

| 2019 | Interest held (%) | Fair value of listed investments | Balance sheet value | Total assets | Total liabilities | Total income | Total expenses |
|---|---|---|---|---|---|---|---|
| TMB Public Company Limited | 23 | 1,109 | 1,509 | 55,804 | 49,974 | 1,145 | 891 |
| Other investments in associates and joint ventures | | | 281 | | | | |
| | | | **1,790** | | | | |

**Investments in associates and joint ventures**

| 2018 | Interest held (%) | Fair value of listed investments | Balance sheet value | Total assets | Total liabilities | Total income | Total expenses |
|---|---|---|---|---|---|---|---|
| TMB Public Company Limited | 30 | 776 | 991 | 23,494 | 20,884 | 1,055 | 722 |
| Other investments in associates and joint ventures | | | 212 | | | | |
| | | | **1,203** | | | | |

TMB is a financial institution providing products and services to Wholesale, Small and Medium Enterprise (SME), and Retail customers. TMB is domiciled in Bangkok, Thailand and is listed on the Stock Exchange of Thailand (SET). In December 2019 TMB merged with Thanachart Bank and became Thailand's sixth-largest bank. Prior to this merger ING paid a capital contribution to TMB of EUR 381 million. As a result of the merger transaction ING recognized a gain of EUR 16 million mainly to partial release of the related foreign currency reserves.

Other investments in associates and joint ventures are mainly financial services and financial technology funds or vehicles operating predominantly in Europe.

ING Group does not hold any interests in Investments in associates and joint ventures that are individually significant to ING Group. Other investments in associates and joint ventures represents a large number of associates and joint ventures with an individual carrying value of less than EUR 50 million.

Significant influence for associates in which the interest held is below 20%, is based on the combination of ING Group's financial interest and other arrangements, such as participation in the Board of Directors.

The reporting dates of certain associates and joint ventures can differ from the reporting date of the Group, but by no more than three months.

Accumulated impairments of EUR 49 million (2018: EUR 15 million) have been recognised. The values presented in the tables above could differ from the values presented in the individual financial statements of the associates and joint ventures, due to the fact that the individual values have been brought in line with ING Group's accounting principles. When the fair value of the investment is below cost for a significant amount or prolonged period of time, an impairment test is performed.

The associates and joint ventures of ING are subject to legal and regulatory restrictions regarding the amount of dividends it can pay to ING. These restrictions are for example dependent on the laws in the country of incorporation for declaring dividends or as a result of minimum capital requirements that are imposed by industry regulators in the countries in which the associates and joint ventures operate. In addition, the associates and joint ventures also consider other factors in determining the appropriate levels of equity needed. These factors and limitations include, but are not limited to, rating agency and regulatory views, which can change over time.

**Changes in Investments in associates and joint ventures**

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 1,203 | 1,088 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | –28 |
| Additions | 507 | 97 |
| Transfers to and from Investments/Other assets and liabilities | 4 | 5 |
| Revaluations | –18 | –2 |
| Share of results | 82 | 146 |
| Dividends received | –58 | –30 |
| Disposals | –10 | –116 |
| Impairments | –34 | –3 |
| Exchange rate differences | 113 | 47 |
| Closing balance | **1,790** | **1,203** |

Share of results from associates and joint ventures of EUR 82 million (2018: EUR 146 million) as included in the table above, is mainly attributable to results of TMB of EUR 77 million (2018: EUR 117 million).
Share of results from associates and joint ventures as presented in the statement of profit or loss includes, besides above mentioned share of results, also impairments.

## 9 Property and equipment

**Property and equipment by type**

| | 2019 | 2018 |
|---|---|---|
| Property in own use | 757 | 780 |
| Equipment | 940 | 879 |
| Right-of-use assets | 1,476 | n/a |
| | **3,172** | **1,659** |

As ING has implemented IFRS 16 Leases without restating comparatives, no Right-of-use assets were recognised in 2018. Reference is made to Note 1 ‘Accounting policies’, 1.4.3. IFRS 16 ’leases’ – Impact of adoption.

ING considers valuations from third party experts in determining the fair values of the property in own use.

**Changes in property in own use**

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 780 | 774 |
| Additions | 5 | 5 |
| Reclassifications | | |
| – Transfers to and from Other Assets | –1 | 11 |
| Amounts recognised in the statement of profit or loss for the year | | |
| – Depreciation | –11 | –14 |
| – Impairments | –2 | –4 |
| – Reversal of impairments | 6 | 17 |
| | **–7** | **–1** |
| Revaluations recognised in equity during the year | 58 | 23 |
| Disposals | –72 | –12 |
| Exchange rate differences | –7 | –20 |
| Closing balance | **757** | **780** |
| | | |
| Gross carrying amount as at 31 December | 1,279 | 1,320 |
| Accumulated depreciation as at 31 December | –385 | –387 |
| Accumulated impairments as at 31 December | –137 | –153 |
| Net carrying value as at 31 December | **757** | **780** |
| **Revaluation surplus** | | |
| Opening balance | 280 | 279 |
| Revaluation in the year | 59 | 1 |
| Closing balance | **339** | **280** |

The cost or the purchase price amounted to EUR 940 million (2018: EUR 1,040 million). Cost or the purchase price less accumulated depreciation and impairments would have been EUR 417 million (2018: EUR 500 million) had property in own use been valued at cost instead of at fair value.

## Changes in equipment

| | Data processing equipment | | Fixtures and fittings and other equipment | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 290 | 291 | 589 | 626 | 879 | 917 |
| Additions | 149 | 148 | 200 | 136 | 349 | 284 |
| Disposals | –1 | –1 | –8 | –4 | –9 | –5 |
| Depreciation | –136 | –133 | –142 | –164 | –278 | –298 |
| Impairments | –0 | –4 | –1 | –1 | –1 | –5 |
| Exchange rate differences | 1 | –8 | 1 | –5 | 2 | –13 |
| Changes in the composition of the group and other changes | 3 | –4 | –5 | 1 | –3 | –2 |
| **Closing balance** | **307** | **290** | **633** | **589** | **940** | **879** |
| | | | | | | |
| Gross carrying amount as at 31 December | 1,479 | 1,346 | 2,408 | 2,305 | 3,886 | 3,651 |
| Accumulated depreciation as at 31 December | –1,171 | –1,055 | –1,774 | –1,716 | –2,946 | –2,771 |
| Accumulated impairments as at 31 December | –1 | –1 | –1 | –0 | –1 | –1 |
| Net carrying value as at 31 December | **307** | **290** | **633** | **589** | **940** | **879** |

Right-of-use assets relates to leased land and buildings, cars and other assets.

## Changes in Right-of-use assets

| | Property | Cars | Other leases | Total |
|---|---|---|---|---|
| | 2019 | 2019 | 2019 | 2019 |
| Opening balance | n/a | n/a | n/a | n/a |
| Effect of changes in accounting policy due to the implementation of IFRS 16 | 1,138 | 70 | 72 | 1,280 |
| Additions | 381 | 65 | –2 | 444 |
| Depreciation | –211 | –40 | –12 | –262 |
| Impairments | –0 | | | –0 |
| Remeasurements | 29 | 1 | 0 | 30 |
| Disposals | –18 | –0 | –0 | –19 |
| Exchange rate differences | 8 | –0 | –1 | 7 |
| Changes in the composition of the group and other changes | –4 | 0 | – | –4 |
| **Closing balance** | **1,323** | **96** | **57** | **1,476** |
| Gross carrying amount as at 31 December | 1,503 | 135 | 69 | 1,707 |
| Accumulated depreciation as at 31 December | –213 | –40 | –12 | –265 |
| Accumulated impairments as at 31 December | –0 | | | –0 |
| Accumulated remeasurement as at 31 December | 33 | 1 | 0 | 34 |
| Net carrying value as at 31 December | **1,323** | **96** | **57** | **1,476** |

## 10 Intangible assets

### Changes in intangible assets

| | Goodwill | | Software | | Other | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 918 | 816 | 868 | 648 | 53 | 5 | 1,839 | 1,469 |
| Additions | 17 | 202 | 94 | 95 | | | 111 | 297 |
| Capitalised expenses | | | 285 | 286 | | | 285 | 286 |
| Amortisation | | | -235 | -204 | -2 | -5 | -237 | -209 |
| Impairments | | | -61 | -12 | | | -61 | -12 |
| Exchange rate differences | -28 | -99 | | -5 | | | -28 | -104 |
| Disposals | | | -1 | | | | -1 | |
| Changes in the composition of the group and other changes | | | 8 | 59 | 1 | 52 | 9 | 111 |
| **Closing balance** | **907** | **918** | **958** | **868** | **52** | **53** | **1,916** | **1,839** |
| | | | | | | | | |
| Gross carrying amount as at 31 December | 907 | 918 | 2,608 | 2,359 | 61 | 60 | 3,575 | 3,338 |
| Accumulated amortisation as at 31 December | | | -1,641 | -1,487 | -7 | -5 | -1,648 | -1,492 |
| Accumulated impairments as at 31 December | | | -9 | -4 | -2 | -2 | -11 | -6 |
| Net carrying value as at 31 December | **907** | **918** | **958** | **868** | **52** | **53** | **1,916** | **1,839** |

### Goodwill

Goodwill is allocated to groups of cash generating units (CGUs) as follows:

#### Goodwill allocation to group of CGUs

| Group of CGU's | Method used for recoverable amount | Discount rate | Long term growth rate | Goodwill 2019 | Goodwill 2018 |
|---|---|---|---|---|---|
| Retail Netherlands | Values in use | 6.10% | 0.00% | 30 | 14 |
| Retail Belgium | Values in use | 6.94% | 0.00% | 50 | 50 |
| Retail Germany | Values in use | 6.10% | 0.00% | 349 | 349 |
| Retail Growth Markets [1] | Values in use | 10.47% | 3.34% | 209 | 231 |
| Wholesale Banking [1] | Values in use | 7.29% | 0.69% | 268 | 274 |
| | | | | **907** | **918** |

1 Goodwill related to Growth Countries is allocated across two groups of CGUs, EUR 209 million to Retail Growth Markets and EUR 61 million to Wholesale Banking (2018: EUR 230 million to Retail Growth Markets and EUR 67 million to Wholesale Banking).

Changes in the goodwill in 2019 mainly relate to the acquisition of 80% of the shares of Intersoftware Group B.V. The transaction resulted in recognition of EUR 17 million of goodwill which is fully allocated to Retail Netherland CGU.

In 2018 changes in the goodwill relate to the acquisition of 75% of the shares of Payvision Holding B.V. and 90% of the shares of Makelaarsland B.V. The acquisition of Payvision and Makelaarsland resulted in a recognition of goodwill of respectively EUR 188 million, allocated to Wholesale Banking, and EUR 14 million, allocated to Retail Netherland.

Other changes in goodwill of the CGU's Wholesale Banking and Retail Growth Markets relate to changes in currency exchange rates. Reference is made to Note 47 'Consolidated companies and businesses acquired and divested' for further information on the acquisitions that took place in 2018, 2019 and the goodwill recognised.

### Methodology

Several methodologies are applied to arrive at the best estimate of the recoverable amount. In line with IFRS, the recoverable amount is determined as the higher of the fair value less costs of disposal and Value in Use (VIU). Fair value less costs of disposal is based on observable share prices (Level 1 inputs in the fair value hierarchy), observable Price-to-Book multiples of relevant peer banks (Level 2), or based on a discounted free cash flow model (Level 3). The VIU calculation is based on a Dividend Discount model using four year management approved plans. When estimating the VIU of a CGU, local conditions and requirements determine the capital requirements, discount rates, and terminal growth rates. These local conditions and requirements determine the ability to upstream excess capital and profits to ING Group. The discount rate calculation includes other inputs such as equity market premium, country risk premium, and long term inflation which are based on market sources and management's judgement. The long term growth rate for EU-countries is based on long-term risk-free rate by reference to the yield of a composite index consisting of Euro generic government bonds, with a maturity of 30 years. For other countries, the growth rate includes long term inflation rate obtained from market sources.

The recoverable amount exceeds the carrying value of the CGUs for 2019 and 2018 and therefore no impairment is required.

### Sensitivity of key assumptions

Key assumptions in the goodwill impairment test model are the Price-to-Book ratios, level 1 inputs (e.g. share price of a listed subsidiary), and the local parameters for CET1, discount rate and long term growth rates. The model was tested for sensitivity by changing the key parameters in the model to more conservative values. The sensitivity analysis did not trigger additional impairment considerations.

### Software and Other intangible assets

Software, includes internally developed software amounting to EUR 741 million (2018: EUR 624 million).

In 2018, Changes in the composition of the group and other changes mainly relates to the recognition of intangible assets following the acquisition of Payvision. Reference is made to Note 47 'Consolidated companies and businesses acquired and divested' for further information on the acquisitions that took place in 2018 and the assets and liabilities recognised.

The carrying value of CGU Wholesale Banking includes EUR 20 million of intangibles with indefinite life which relates to acquired trade names in the payments and cash management business. The asset is deemed to have indefinite life because there is no foreseeable limit to the cash flows generated by those intangible assets.

No impairment of indefinite useful life asset was recognised in 2019 (2018: nil).

## 11 Other assets

**Other assets by type**

| | 2019 | 2018 |
|---|---|---|
| Net defined benefit assets | 709 | 527 |
| Investment properties | 46 | 54 |
| Property development and obtained from foreclosures | 98 | 124 |
| Accrued assets | 783 | 783 |
| Amounts to be settled | 2,835 | 4,248 |
| Other | 2,546 | 2,696 |
| | **7,018** | **8,433** |

Disclosures in respect of Net defined benefit assets are provided in Note 36 'Pension and other post-employment benefits'.

### Accrued assets

Accrued assets relate to income to be received attributable to 2019 and amounts paid in advance in respect of costs chargeable to subsequent periods.

### Amounts to be settled
Amounts to be settled include primarily transactions not settled at the balance sheet date. The nature of these transaction is short term and are expected to settle shortly after the closing date of the balance sheet.

### Other
Other relates to various receivables in the normal course of business, amongst others, short term receivables relating to mortgage issuance and other amounts receivable from customers.

## 12 Assets and liabilities held for sale

Assets and liabilities held for sale includes disposal groups whose carrying amount will be recovered principally through a sale transaction rather than through continuing operations.

In December 2018, ING reached an agreement to sell part of the ING Lease Italy business and classified the this Italian lease business as Assets held for Sale (EUR 1.261 million). In the first 6 months of 2019 customers repaid EUR 100 million on outstanding. The sale of this Italian lease business was completed per 1 July 2019. The settlement price amounted to EUR 1.162 million, consisted of a EUR 368 million cash settlement, a EUR 20 million Deferred Purchase Price and a EUR 774 million Senior Loan facility for the portfolio of lease receivables. The deferred purchase price is linked to the performance of the sold portfolio and is reported under the financial assets mandatorily measured at fair value through profit and loss. The additional loss in 2019 amounted to EUR -2 million (2018: EUR -123 million).

Reference is made to Note 25 ‘Result on disposal of group companies’ and to Note 47 ‘Consolidated companies and businesses acquired and divested’.

## 13 Deposits from banks

Deposits from banks include non-subordinated debt from banks, except for amounts in the form of debt securities.

**Deposits from banks by type**

| | Netherlands | | International | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Non-interest bearing | 107 | 22 | 73 | 412 | 180 | 434 |
| Interest bearing | 17,544 | 17,211 | 17,101 | 19,686 | 34,646 | 36,896 |
| | **17,651** | **17,233** | **17,175** | **20,097** | **34,826** | **37,330** |

Deposits from banks includes ING’s participation in the targeted longer-term refinancing operations (TLTRO) of EUR 17.7 billion (2018: EUR 17.7 billion). The TLTRO aims to stimulate lending to the real economy in the Eurozone. The interest rate on the TLTRO’s is fixed over the life of each operation at the benchmark rate of the European Central Bank.

## 14 Customer deposits

**Customer deposits**

| | 2019 | 2018[1] |
|---|---|---|
| Savings accounts | 326,942 | 322,795 |
| Credit balances on customer accounts | 224,022 | 205,053 |
| Corporate deposits | 22,329 | 26,920 |
| Other | 1,140 | 1,044 |
| | **574,433** | **555,812** |

1 The prior periods have been updated to improve consistency and comparability.

**Customer deposits by type**

| | Netherlands | | International | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Non-interest bearing | 19,030 | 16,841 | 24,782 | 25,342 | 43,812 | 42,182 |
| Interest bearing | 159,664 | 156,023 | 370,957 | 357,606 | 530,621 | 513,629 |
| | **178,694** | **172,863** | **395,739** | **382,948** | **574,433** | **555,812** |

Savings accounts relate to the balances on savings accounts, savings books, savings deposits, and time deposits of private individuals.

## 15 Financial liabilities at fair value through profit or loss

**Financial liabilities at fair value through profit or loss**

| | 2019 | 2018 |
|---|---|---|
| Trading liabilities | 28,042 | 31,215 |
| Non-trading derivatives | 2,215 | 2,299 |
| Designated at fair value through profit or loss | 47,684 | 59,179 |
| | **77,942** | **92,693** |

Reference is made to Note 43 ‘Transfer of financial assets’ for information on securities lending as well as sale and repurchase transactions included in Trading liabilities and Financial liabilities designated at fair value through profit or loss.

### Trading liabilities

**Trading liabilities by type**

| | 2019 | 2018 |
|---|---|---|
| Equity securities | 193 | 355 |
| Debt securities | 1,201 | 5,363 |
| Funds on deposit | 5,322 | 3,968 |
| Derivatives | 21,325 | 21,528 |
| | **28,042** | **31,215** |

As at 31 December 2019, Trading liabilities include funds on deposit of EUR 4,556 million (2018: EUR 3,227 million) with regard to repurchase transactions.

### Non-trading derivatives

**Non-trading derivatives by type**

| | 2019 | 2018 |
|---|---|---|
| Derivatives used in: | | |
| – Fair value hedges | 873 | 1,035 |
| – Cash flow hedges | 339 | 458 |
| – Hedges of net investments in foreign operations | 51 | 17 |
| Other non-trading derivatives | 953 | 791 |
| | **2,215** | **2,299** |

Reference is made to Note 39 ‘Derivatives and hedge accounting’ for information on derivatives used for hedge accounting.

Other non-trading derivatives mainly includes interest rate swaps and foreign currency swaps for hedging purposes, but for which no hedge accounting is applied.

### Designated at fair value through profit or loss

**Designated at fair value through profit or loss by type**

| | 2019 | 2018 |
|---|---|---|
| Debt securities | 8,053 | 8,216 |
| Funds entrusted | 39,386 | 50,650 |
| Subordinated liabilities | 246 | 313 |
| | **47,684** | **59,179** |

As at 31 December 2019, financial liabilities designated at fair value through profit or loss include funds entrusted of EUR 38,492 million (2018: EUR 49,010 million) with regard to repurchase transactions.

As at 31 December 2019, the change in the fair value of financial liabilities designated at fair value through profit or loss attributable to changes in credit risk is EUR 139 million (2018: EUR 18 million) on a cumulative basis. This change has been determined as the amount of change in fair value of the financial liability that is not attributable to changes in market conditions that gave rise to market risk (i.e. mainly interest rate risk based on yield curves).

The amount that ING Group is contractually required to pay at maturity to the holders of financial liabilities designated at fair value through profit or loss excluding repurchase agreements is EUR 8,634 million (2018: EUR 9,934 million).

## 16 Provisions

**Provisions by type**

| | 2019 | 2018 |
|---|---|---|
| Reorganisation provisions | 385 | 613 |
| Other provisions | 303 | 399 |
| | **688** | **1,011** |

### Reorganisation provisions

**Changes in reorganisation provisions**

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 613 | 1,097 |
| Additions | 56 | 53 |
| Unused amounts reversed | –49 | –49 |
| Utilised | –234 | –487 |
| Other changes | –0 | –2 |
| Closing balance | **385** | **613** |

In 2019 the addition to the reorganisation provision is mainly related to ING's Agile transformation in Germany and updates in existing reorganization provisions.

In 2018, changes in the reorganisation provisions were mainly attributable to existing initiatives following the digital transformation programmes of ING Bank. These initiatives are implemented over a period of several years and the estimate of the reorganisation provisions is inherently uncertain. The provision at the balance sheet date represents the best estimate of the expected redundancy costs and are expected to be sufficient to cover these costs.

## Other provisions

### Changes in other provisions

| | Litigation | | Other | | Total | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 165 | 365 | 234 | 251 | 399 | 616 |
| Effect of change in accounting policies | | | 7 | 11 | 7 | 11 |
| Additions | 74 | 59 | 46 | 35 | 120 | 95 |
| Interest | | | –5 | 1 | –5 | 1 |
| Unused amounts reversed | –31 | –76 | –38 | –37 | –68 | –113 |
| Utilised | –104 | –186 | –12 | –28 | –116 | –214 |
| Exchange rate differences | –1 | –4 | –0 | 1 | –1 | –3 |
| Other changes | –0 | 6 | –31 | –0 | –31 | 6 |
| Closing balance | **102** | **165** | **201** | **234** | **303** | **399** |

Reference is made to Note 46 'Legal proceedings' for developments in litigation provisions.

In 2019, Other provisions – other includes provisions of EUR 25 million (2018: EUR 42 million) that relate to credit replacement facilities and EUR 93 million (2018: EUR 80 million) that relate to non-credit replacement, off-balance facilities.

As at 31 December 2019 amounts expected to be settled within twelve months, amount to EUR 146 million. The amounts included in Other provisions are based on best estimates with regard to amounts and timing of cash flows required to settle the obligation.

Further reference is made to Note 28 'Other operating expenses'.

## 17 Other liabilities

### Other liabilities by type

| | 2019 | 2018 |
|---|---|---|
| Net defined benefit liability | 483 | 421 |
| Other post-employment benefits | 84 | 76 |
| Other staff-related liabilities | 526 | 473 |
| Share-based payment plan liabilities | 6 | 9 |
| Other taxation and social security contributions | 442 | 403 |
| Rents received in advance | 9 | 61 |
| Costs payable | 2,111 | 2,272 |
| Amounts to be settled | 4,741 | 6,098 |
| Lease liabilities | 1,507 | n/a |
| Other | 2,921 | 3,697 |
| | **12,829** | **13,510** |

Disclosures in respect of Net defined benefit liabilities are provided in Note 36 'Pension and other post-employment benefits'.

### Other staff-related liabilities

Other staff-related liabilities includes vacation leave provisions, variable compensation provisions, jubilee provisions, and disability/illness provisions.

### Costs payable

Costs payable relate to costs attributable to 2019, which will be paid in subsequent periods.

### Amounts to be settled

Amounts to be settled include primarily transactions not settled at the balance sheet date. The nature of these transaction is short term and are expected to settle shortly after the closing date of the balance sheet.

### Lease liabilities

As ING has implemented IFRS 16 Leases without restating comparatives, no Lease Liabilities were recognised in 2018. Reference is made to Note 1 'Accounting policies', 1.4.3. IFRS 16 'leases' – Impact of adoption.

The total cash outflow for leases in 2019 was EUR 271 million.

### Other

Other relates mainly to balances on margin accounts or amounts payable to customers.

## 18 Debt securities in issue

Debt securities in issue relate to debentures and other issued debt securities with either fixed interest rates or interest rates based on floating interest rate levels, such as certificates of deposit and accepted bills issued by ING Group, except for subordinated items. Debt securities in issue do not include debt securities presented as Financial liabilities at fair value through profit or loss. ING Group does not have debt securities that are issued on terms other than those available in the normal course of business. The maturities of the debt securities are as follows:

**Debt securities in issue – maturities**

| | 2019 | 2018 |
|---|---|---|
| **Fixed rate debt securities** | | |
| Within 1 year | 26,871 | 32,626 |
| More than 1 year but less than 2 years | 10,358 | 7,766 |
| More than 2 years but less than 3 years | 9,527 | 10,267 |
| More than 3 years but less than 4 years | 6,321 | 8,228 |
| More than 4 years but less than 5 years | 2,836 | 6,288 |
| More than 5 years | 29,007 | 20,321 |
| Total fixed rate debt securities | **84,920** | **85,496** |
| | | |
| **Floating rate debt securities** | | |
| Within 1 year | 24,938 | 22,684 |
| More than 1 year but less than 2 years | 3,126 | 4,134 |
| More than 2 years but less than 3 years | 3,041 | 1,587 |
| More than 3 years but less than 4 years | 1,541 | 1,234 |
| More than 4 years but less than 5 years | 144 | 1,563 |
| More than 5 years | 816 | 3,053 |
| Total floating rate debt securities | **33,608** | **34,255** |
| | | |
| Total debt securities | **118,528** | **119,751** |

In 2019 Debt securities in issue decreased by EUR 1.2 billion. This decrease is mainly attributable to a decrease in commercial paper of EUR 6.1 billion, matured savings certificates of EUR 1.2 billion, the redemption of RMBS (residential mortgage backed securities) of EUR 2.3 billion, partly offset by the issuance of long term maturity bonds of EUR 2.8 billion, covered bonds of EUR 2.9 billion and certificates of deposits of EUR 1.9 billion, and an increase in other Debt securities in issue of EUR 0.8 billion.

## 19 Subordinated loans

**Subordinated loans by group companies**

| | 2019 | 2018 |
|---|---|---|
| ING Groep N.V. | 13,069 | 10,355 |
| ING Group companies | 3,519 | 3,370 |
| | **16,588** | **13,724** |

Subordinated loans issued by ING Groep N.V. include bonds issued to raise Tier 1 and lower Tier 2 (CRD IV eligible) capital for ING Bank N.V. Under IFRS these bonds are classified as liabilities and for regulatory purposes, they are considered capital. Subordinated loans issued by ING Group companies comprise, for the most part, subordinated loans which are subordinated to all current and future liabilities of ING Bank N.V.

**Changes in subordinated loans**

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 13,724 | 15,968 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | 241 |
| New issuances | 3,429 | 1,859 |
| Repayments | –933 | –4,646 |
| Exchange rate differences and other | 367 | 302 |
| Closing balance | **16,588** | **13,724** |

In 2019 ING Groep N.V. issued two Perpetual additional Tier 1 Contingent Convertible Capital Securities of USD 1.25 billion with first call date on 16 April 2024 and USD 1.5 billion with first call date on 16 November 2026. In addition, subordinated Tier 2 notes of EUR 1 billion have been issued on 13 November 2019.

In June 2019 ING redeemed USD 1 billion Tier 1 ING Perpetual Hybrid Capital Securities.

The average interest rate on subordinated loans is 4.38% (2018: 4.44%). The interest expense during the year 2019 was EUR 660 million (2018: EUR 711 million).

For additional information, reference is made to the Parent company financial statements, Note 4 ‘Subordinated loans’.

# Equity

## 20 Equity

**Total equity**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Share capital and share premium | | | |
| - Share capital | 39 | 39 | 39 |
| - Share premium | 17,078 | 17,050 | 17,006 |
| | **17,117** | **17,088** | **17,045** |
| | | | |
| Other reserves | | | |
| - Revaluation reserve: Available-for-sale and other | n/a | n/a | 3,447 |
| - Revaluation reserve: Equity securities at FVOCI | 1,580 | 1,914 | n/a |
| - Revaluation reserve: Debt instruments at FVOCI | 299 | 363 | n/a |
| - Revaluation reserve: Cash flow hedge | 1,208 | 604 | 263 |
| - Revaluation reserve: Credit liability | –114 | 8 | n/a |
| - Revaluation reserve: Property in own use | 253 | 204 | 203 |
| - Net defined benefit asset/liability remeasurement reserve | –336 | –394 | –400 |
| - Currency translation reserve | –2,079 | –2,043 | –1,663 |
| - Share of associates and joint ventures and other reserves | 3,189 | 2,940 | 2,527 |
| - Treasury shares | –10 | –11 | –15 |
| | **3,990** | **3,586** | **4,362** |
| | | | |
| Retained earnings | **32,663** | **30,258** | **28,999** |
| | | | |
| Shareholders’ equity (parent) | **53,769** | **50,932** | **50,406** |
| Non-controlling interests | 893 | 803 | 715 |
| Total equity | **54,662** | **51,735** | **51,121** |

## Share capital and share premium

### Share capital

**Share capital**

| | Ordinary shares (par value EUR 0.01) | | | | | |
|---|---|---|---|---|---|---|
| | Number x 1,000 | | | Amount | | |
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Authorised share capital | 14,729,000 | 14,729,000 | 14,729,000 | 147 | 147 | 147 |
| Unissued share capital | 10,832,266 | 10,837,272 | 10,843,210 | 108 | 108 | 108 |
| Issued share capital | **3,896,734** | **3,891,728** | **3,885,790** | **39** | **39** | **39** |

**Changes in issued share capital**

| | Ordinary shares (par value EUR 0.01) | |
|---|---|---|
| | Number x 1,000 | Amount |
| Issued share capital as at 1 January 2017 | 3,878,484 | 39 |
| Issue of shares | 7,306 | |
| Issued share capital as at 31 December 2017 | **3,885,790** | **39** |
| Issue of shares | 5,938 | |
| Issued share capital as at 31 December 2018 | **3,891,728** | **39** |
| Issue of shares | 5,006 | |
| Issued share capital as at 31 December 2019 | **3,896,734** | **39** |

In 2019, ING Groep N.V. issued 5.0 million ordinary shares (2018: 5.9 million ordinary shares, 2017: 7.3 million). These issues were made in order to fund obligations arising from share-based employee incentive programmes.

In 2019, 2018 and 2017 respectively, ING Groep N.V. issued USD 2,750 million, nil and nil Perpetual Additional Tier 1 Contingent Convertible Capital Securities which can, in accordance with their terms and conditions, convert by operation of law into ordinary shares if the conditions to such conversion are fulfilled. As a result of this conversion, the issued share capital can increase by no more than 306 million ordinary shares. Reference is made to Note 19 'Subordinated loans' and to the Parent company financial statements, Note 4 'Subordinated loans'.

#### Ordinary shares

All ordinary shares are in registered form. No share certificates have been issued. Ordinary shares may be transferred by means of a deed of transfer. A transfer of ordinary shares requires written acknowledgement by ING Groep N.V. Ordinary shares are listed on various stock exchanges. The par value of ordinary shares is EUR 0.01. The authorised ordinary share capital of ING Groep N.V. currently consists of 14,729 million ordinary shares. As at 31 December 2019, 3,897 million ordinary shares were issued and fully paid.

#### Ordinary shares held by ING Group (Treasury shares)

As at 31 December 2019, 0.9 million ordinary shares (2018: 1.1 million and 2017: 0.9 million) of ING Groep N.V. with a par value of EUR 0.01 are held by ING Groep N.V. or its subsidiaries. The obligations with regard to the existing stock option plan and the share plans will be funded either by cash or by newly issued shares at the discretion of ING Group.

### Share premium

**Share premium**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Opening balance | 17,050 | 17,006 | 16,950 |
| Issue of shares | 28 | 44 | 56 |
| Closing balance | **17,078** | **17,050** | **17,006** |

The increase in share premium, is a result of the issuance of ordinary shares related to share-based employee incentive programmes.

## Other reserves

### Revaluation reserves

**Changes in revaluation reserves**

| | Equity securities at FVOCI | | | Debt instruments at FVOCI | | | AFS and other | | | Cash flow hedge | | | Credit liability | | | Property in own use | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Opening balance | 1,914 | n/a | n/a | 363 | n/a | n/a | n/a | 3,447 | 3,830 | 604 | 263 | 777 | 8 | n/a | n/a | 204 | 203 | 204 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | 2,432 | | | 580 | | | –3,447 | | | | | | –190 | | | | |
| Changes in credit liability reserve | | | | | | | | | | | | | –116 | 199 | | | | |
| Unrealised revaluations | 137 | –461 | | –31 | –163 | | | | –293 | 604 | 342 | –514 | | | | 58 | 3 | 25 |
| Realised gains/losses transferred to the statement of profit or loss | | | | –33 | –54 | | | | –90 | | | | | | | | | |
| Realised revaluations transferred to retained earnings | –472 | –56 | | | | | | | | | | | –6 | | | –9 | –2 | –26 |
| Closing balance | **1,580** | **1,914** | **n/a** | **299** | **363** | **n/a** | **n/a** | **n/a** | **3,447** | **1,208** | **604** | **263** | **–114** | **8** | **n/a** | **253** | **204** | **203** |

**Equity securities at FVOCI**

In 2019, the unrealised revaluations of EUR 137 million are due to the revaluation of shares in Bank of Beijing EUR 35 million and shares in EquensWorldLine EUR 101 million. The EUR -472 million transfer of revaluation reserve to retained earnings is mainly related to the sale of shares in Kotak Mahindra Bank EUR -320 million and EquensWorldLine EUR -149 million.

In 2018, the Equity securities at FVOCI revaluation reserve decreased by EUR 517 million, mainly due to the revaluation of shares in Bank of Beijing EUR –549 million, partly offset by revaluation of shares in Kotak Mahindra Bank EUR 71 million.

**Available-for-sale and other**

As from 2018, due to implementation of IFRS 9, the revaluation results of Available-for-sale and other are reported in the FVOCI reserve.

In 2017, the Available-for-sale revaluation reserve decreased by EUR 383 million mainly due to the revaluation of shares in Bank of Beijing EUR –479 million, partly offset by revaluation of shares in Kotak Mahindra Bank EUR 302 million.

**Cash flow hedge**

ING mainly hedges floating rate lending with interest rate swaps. Due to decrease in interest rate yield curve in 2019 the interest rate swaps had a positive revaluation of EUR 604 million which is recognised in cash flow hedge reserve.

### Net defined benefit asset/liability remeasurement reserve

Reference is made to Note 36 ‘Pension and other post-employment benefits’.

### Currency translation reserve

**Changes in Currency translation reserve**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Opening balance | –2,043 | –1,663 | –770 |
| Unrealised revaluations | –134 | 71 | 192 |
| Realised gains/losses transferred to the statement of profit or loss | –138 | | |
| Exchange rate differences | 236 | –451 | –1,085 |
| Closing balance | **–2,079** | **–2,043** | **–1,663** |

Realised gains/losses transferred to the statement of profit or loss is related to the sale of shares in Kotak Mahindra Bank (EUR -119 million) and the effect of the merger transaction of TMB (EUR -18 million).

Unrealised revaluations relates to changes in the value of hedging instruments that are designated as net investment hedges. The hedging strategy is to hedge the CET1 ratio. The net increase of unrealized revaluations and Exchange rate differences of EUR 102 million is related to several currencies.

### Share of associates, joint ventures and other reserves

**Changes in share of associates, joint ventures and other reserves**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Opening balance | 2,940 | 2,527 | 2,235 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | –28 | |
| Result for the year | 180 | 160 | 153 |
| Transfer to/from retained earnings | 69 | 280 | 139 |
| Closing balance | **3,189** | **2,940** | **2,527** |

### Treasury shares

**Changes in treasury shares**

| | Amount | | | Number | | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Opening balance | –11 | –15 | –8 | 1,137,701 | 944,257 | 600,634 |
| Purchased/sold | 1 | 4 | –7 | –218,314 | 193,444 | 343,623 |
| Closing balance | **–10** | **–11** | **–15** | **919,387** | **1,137,701** | **944,257** |

### Retained earnings

**Changes in retained earnings**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Opening balance | 30,258 | 28,999 | 26,907 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | –390 | |
| Transfer to/from other reserves | 418 | –211 | –139 |
| Result for the year | 4,601 | 4,543 | 4,752 |
| Dividend | –2,650 | –2,607 | –2,564 |
| Employee stock options and share plans | 13 | 19 | 21 |
| Changes in composition of the group and other changes | 23 | –96 | 22 |
| Closing balance | **32,663** | **30,258** | **28,999** |

**Changes in the composition of the group**

In 2019 ING acquired the additional 23% of shares in Payvsion. Given that ING already had control over Payvision, the acquisition of the shares in 2019 represents a shareholder transaction and resulted in a transfer between Non-controlling interest and Retained earnings within Shareholders equity of EUR 24 million. Reference is made to Note 47, 'Consolidated companies and businesses acquired and divested', 'Acquisitions'.

### Dividend

In 2019, a cash dividend of EUR 2,650 million (2018: EUR 2,607 million and 2017: EUR 2,564 million) was paid to the shareholders of ING Group.

For further information, reference is made to Note 30 'Dividend per ordinary share'.

### Ordinary shares - Restrictions with respect to dividend and repayment of capital

The following equity components cannot be freely distributed: Revaluation reserves, Net defined benefit asset/liability remeasurement reserve, Currency translation reserve, Share of associates and joint ventures reserve and Other reserves including the part related to the former Stichting Regio Bank and the former Stichting Vakbondsspaarbank SPN.

As at 31 December 2019, an amount of EUR 1,818 million (2018: EUR 1,638 million; 2017: EUR 1,478 million) related to the former Stichting Regio Bank and the former Stichting Vakbondsspaarbank SPN is included.

ING Groep N.V. is subject to legal restrictions regarding the amount of dividends it can pay to the holders of its ordinary shares. Pursuant to the Dutch Civil Code, dividends can only be paid up to an amount equal to the excess of the company's own funds over the sum of the paid-up capital and reserves required by law.

Moreover, ING Groep N.V.'s ability to pay dividends is dependent on the dividend payment ability of its subsidiaries, associates and joint ventures. ING Groep N.V. is legally required to create a non-distributable reserve insofar as profits of its subsidiaries, associates and joint ventures are subject to dividend payment restrictions which apply to those subsidiaries, associates and joint ventures themselves. Such restrictions may among others be of a similar nature as the restrictions which apply to ING Groep N.V., including minimum capital requirements that are imposed by industry regulators in the countries in which the subsidiaries, associates and joint ventures operate, or other limitations which may exist in certain countries.

Non distributable reserves, determined in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code, from ING Group's subsidiaries, associates and joint ventures are as follows:

**Non-distributable reserves**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| ING Bank | 8,397 | 7,603 | 7,603 |
| Other | 0 | 97 | 75 |
| Non-distributable reserves | **8,398** | **7,700** | **7,678** |

Furthermore there are restrictions to the ability of subsidiaries, associates and joint ventures to distribute reserves to ING Groep N.V. as a result of minimum capital requirements that are imposed by industry regulators in the countries in which the subsidiaries operate.

In addition to the legal and regulatory restrictions on distributing dividends from subsidiaries, associates and joint ventures to ING Groep N.V. there are various other considerations and limitations that are taken into account in determining the appropriate levels of equity in the Group's subsidiaries, associates and joint ventures. These considerations and limitations include, but are not restricted to, rating agency and regulatory views, which can change over time; it is not possible to disclose a reliable quantification of these limitations. For an overview of the minimal capital requirements of ING Group refer to the 'Capital Management' section.

Without prejudice to the authority of the Executive Board to allocate profits to reserves and to the fact that the ordinary shares are the most junior securities issued by ING Groep N.V., no specific dividend payment restrictions with respect to ordinary shares exist.

Furthermore, ING Groep N.V. is subject to legal restrictions with respect to repayment of capital to holders of ordinary shares. Capital may be repaid to the holders of ordinary shares pursuant to an amendment of ING Groep N.V.'s Articles of Association whereby the ordinary shares are written down.

Pursuant to the Dutch Civil Code, capital may only be repaid if none of ING Groep N.V.'s creditors opposes such a repayment within two months following the announcement of a resolution to that effect.

### Cumulative preference shares (not issued)

Pursuant to the Articles of Association of ING Groep N.V. the authorised cumulative preference share capital consists of 4.6 billion cumulative preference shares, of which none have been issued. The par value of these cumulative preference shares is EUR 0.01.

The cumulative preference shares rank before the ordinary shares in entitlement to dividend and to distributions upon liquidation of ING Groep N.V.

The dividend on the cumulative preference shares will be equal to a percentage, calculated on the amount compulsorily paid up or yet to be paid up. This percentage shall be equal to the average of the Euro OverNight Index Average (EONIA) as calculated by the European Central Bank during the financial year for which the distribution is made; this percentage being weighted on the basis of the number of days for which it applies, and increased by 2.5 percentage points.

If, and to the extent that the profit available for distribution is not sufficient to pay the dividend referred to above in full, the shortfall will be made up from the reserves insofar as possible. If, and to the extent that, the dividend distribution cannot be made from the reserves, the profits earned in subsequent years shall first be used to make up the shortfall before any distribution may be made on shares of any other category.

ING Groep N.V.'s Articles of Association make provision for the cancellation of cumulative preference shares. Upon cancellation of cumulative preference shares and upon liquidation of ING Groep N.V., the amount paid up on the cumulative preference shares will be repaid together with the accrued dividend as well as any dividend shortfall in preceding years, insofar as this shortfall has not yet been made up.

No specific dividend payment restrictions with respect to the cumulative preference shares exist.

# Notes to the Consolidated statement of profit or loss

## 21 Net interest income

**Net interest income**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Interest income on loans | 19,318 | 18,985 [1] | 18,406 |
| Interest income on financial assets at fair value through OCI | 615 | 554 | n/a |
| Interest income on financial assets at amortised cost | 673 | 780 [1] | n/a |
| Interest income on non-trading derivatives (hedge accounting) | 4,319 | 4,497 | n/a |
| Negative interest on liabilities | 422 | 453 | 500 |
| **Total interest income using effective interest rate method** | **25,347** | **25,268** | **n/a** |
| | | | |
| Interest income on financial assets at fair value through profit or loss | 1,897 | 1,795 | n/a |
| Interest income on investments | n/a | n/a | 1,494 |
| Interest income on trading derivatives | n/a | n/a | 16,108 |
| Interest income on other trading portfolio | n/a | n/a | 1,028 |
| Interest income on non-trading derivatives (no hedge accounting) | 1,181 | 1,059 [1] | 700 [1] |
| Interest income on non-trading derivatives (hedge accounting) | n/a | n/a | 5,690 |
| Interest income other | 30 | 25 | 138 |
| **Total other interest income** | **3,107** | **2,880** | **n/a** |
| **Total interest income** | **28,454** | **28,148** | **44,064** |

| | 2019 | 2018[1] | 2017 |
|---|---|---|---|
| Interest expense on deposits from banks | 361 | 362 | 301 |
| Interest expense on customer deposits | 2,957 | 2,671 | 2,665 |
| Interest expense on debt securities in issue | 2,350 | 2,254 | 2,054 |
| Interest expense on subordinated loans | 660 | 711 | 784 |
| Negative interest on assets | 349 | 412 | 407 |
| Interest expense on non-trading derivatives (hedge accounting) | 4,615 | 4,826 | 5,946 |
| **Total interest expense using effective interest rate method** | **11,291** | **11,235** | **n/a** |
| | | | |
| Interest expense on financial liabilities at fair value through profit or loss | 1,695 | 1,578 | n/a |
| Interest expense on trading derivatives | n/a | n/a | 16,117 |
| Interest expense on other trading liabilities | n/a | n/a | 744 |
| Interest expense on non-trading derivatives (no hedge accounting) | 1,311 | 1,387 [1] | 1,001 [1] |
| Interest expense on lease liabilities | 25 | n/a | n/a |
| Interest expense other | 54 | 33 | 331 |
| Total other interest expense | 3,084 | **2,997** | **n/a** |
| Total interest expense | **14,376** | **14,232** | **30,350** |
| Net interest income | **14,079** | **13,916** | **13,714** |

1 The prior periods have been updated to improve consistency and comparability.

Total Net interest income of EUR 14,079 million (2018: EUR 13,916 million) includes interest income and expense for instruments calculated using the effective interest rate method and other interest income and interest expense. IFRS 9 resulted in changes to IAS 1 for the presentation of Interest income for instruments calculated using the effective interest rate method, which ING reports as a separate line item in the consolidated statement of profit or loss as from 2018.

To further enhance the relevance of the interest disclosures, ING Group changed its separate presentation since 2018 of interest (income and expenses) for trading derivatives, trading securities and trading loans / deposits (mainly repo's) to presenting the full fair value movements in 'Valuation results and net trading income'. The change in presentation is in line with the changed presentation of accrued interest in the balance sheet that is no longer separately presented, but included in the corresponding balance sheet item of the host contract.

The new interest presentation was applied prospectively together with the other presentation requirements of IFRS 9 as from 2018.

## 22 Net fee and commission income

**Fee and commission income**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Funds transfer | 1,513 | 1,394 | 1,172 |
| Securities business | 603 | 618 | 532 |
| Insurance broking | 191 | 173 | 176 |
| Asset management fees | 205 | 170 | 116 |
| Brokerage and advisory fees | 611 | 584 | 548 |
| Other | 1,317 | 1,302 | 1,321 |
| | **4,439** | **4,240** | **3,865** |

Other, mainly consists of commission fees in respect of bank guarantees of EUR 202 million (2018: EUR 207 million; 2017: EUR 209 million), in respect of underwriting syndication loans of EUR 10 million (2018: EUR 4 million; 2017: EUR 52 million), in respect of structured finance fees of EUR 141 million (2018: EUR 129 million; 2017: EUR 136 million), and in respect of collective instruments distributed but not managed by ING of EUR 167 million (2018: EUR 165 million; 2017: EUR 165 million).

**Fee and commission expenses**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Funds transfer | 659 | 597 | 437 |
| Securities business | 140 | 170 | 150 |
| Insurance broking | 2 | 2 | 4 |
| Asset management fees | 8 | 4 | 5 |
| Brokerage and advisory fees | 282 | 220 | 192 |
| Other | 481 | 448 | 367 |
| | **1,571** | **1,442** | **1,155** |

All of ING's net fee and commission income are in scope of IFRS 15 'Revenue from Contracts with Customers'. Reference is made to Note 34 'Segments' which includes net fee and commission income, as reported to the Executive Board and the Management Board Banking, disaggregated by line of business and by geographical segment.

## 23 Valuation results and net trading income

**Valuation results and net trading income**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Securities trading results | 974 | –722 | 656 |
| Derivatives trading results | –998 | 540 | 59 |
| Other trading results | 117 | –111 | 62 |
| Change in fair value of derivatives relating to | | | |
| – fair value hedges | –318 | 61 | 700 |
| – cash flow hedges (ineffective portion) | 47 | –19 | 44 |
| – other non-trading derivatives | 93 | 992 | –1,185 |
| Change in fair value of assets and liabilities (hedged items) | 395 | –52 | –793 |
| Valuation results on assets and liabilities designated at FVPL (excluding trading) | –358 | 366 | –109 |
| Foreign exchange transactions results | 801 | 69 | 1,194 |
| | **754** | **1,124** | **628** |

Securities trading results includes the results of market making in instruments such as government securities, equity securities, corporate debt securities, money-market instruments, and interest rate derivatives such as swaps, options, futures, and forward contracts. Foreign exchange transactions results include gains and losses from spot and forward contracts, options, futures, and translated foreign currency assets and liabilities. As from current year the other trading results are presented separately in this disclosure. Prior year figures are updated accordingly. Other trading results include the results of trading loans and funds entrusted.

The portion of trading gains and losses relating to trading securities still held as at 31 December 2019 amounts to EUR -82 million (2018: EUR 396 million; 2017: EUR -68 million).

Net trading income relates to trading assets and trading liabilities which include assets and liabilities that are classified under IFRS as Trading but are closely related to servicing the needs of the clients of ING. ING offers products that are traded on the financial markets to institutional clients, corporate clients, and governments. ING Group's trading books are managed based on internal limits and comprise a mix of products with results which could be offset. A significant part of the derivatives in the trading portfolio are related to servicing corporate clients in their risk management to hedge for example currency or interest rate exposures. From a risk perspective, the gross amount of trading assets must be considered together with the gross amount of trading liabilities, which are presented separately on the statement of financial position. However, IFRS does not always allow netting of these positions in the statement of financial position. Reference is made to Note 4 'Financial assets at fair value through profit or loss' and Note 15 'Financial liabilities at fair value through profit or loss' for information on trading liabilities.

The majority of the risks involved in security and currency trading is economically hedged with derivatives. The securities trading results are partly offset by results on these derivatives. The result of these derivatives is included in Derivatives trading results. The result on currency trading is included in foreign exchange transactions results.

In 2019, Derivatives trading results include EUR 39 million CVA/DVA adjustments on trading derivatives (2018: EUR -20 million; 2017: EUR 47 million).

'Valuation results and net trading income' include the fair value movements on derivatives (used for both hedge accounting and economically hedging exposures) as well as the changes in the fair value of assets and liabilities included in hedging relationships as hedged items. Reference is made to Note 39 'Derivatives and hedge accounting' for information on derivatives used for hedge accounting.
The fair value movements on the derivatives are influenced by changes in the market conditions, such as stock prices, interest rates and currency exchange rates. In addition, 'Valuation results and net trading income' include the results on assets and liabilities designated at fair value through profit or loss.

The Valuation results on assets and liabilities designated at fair value through profit or loss include fair value changes on certain issued debt securities. Valuation results on assets and liabilities designated at fair value through profit or loss were mainly due to changes in the fair value of financial liabilities driven by changes in market conditions as disclosed in Note 15 'Financial liabilities at fair value through profit or loss'.

In 2019, Valuation results on assets and liabilities designated at fair value through profit or loss (excluding trading) include fair value adjustments on own issued notes amounting to EUR -424 million (2018: EUR 302 million; 2017: EUR -107 million). In 2017, DVA adjustment on own issued notes amounting to EUR -79 million was included in Valuation results. Starting 2018, in accordance with IFRS 9, the DVA adjustment on own issued notes is recognised in Other Comprehensive Income 'Credit liability reserve'.
Compared to previous years, in 2019 Valuation results and net trading income do not include results on non-trading derivatives related to warrants on the shares of Voya and NN Group (2018: EUR 90 million; 2017: EUR -52 million). As at 31 December 2018 ING no longer holds any warrants on the shares of Voya and NN Group.

Interest income from trading assets in 2019 amounted to EUR15,187 million (2018: EUR 13,924 million). Interest expense from trading liabilities in 2019 amounted to EUR 14,922 million (2018: EUR 13,976 million).

'Valuation results and net trading income' are reflected in the Consolidated statement of cash flows in the line Result before tax - Adjusted for: other.

## 24 Investment income

**Investment income**

| | 2019[1] | 2018[1] | 2017[1] |
|---|---|---|---|
| Dividend income | **115** | **102** | **80** |
| | | | |
| Realised gains/losses on disposal of debt instruments measured at FVOCI | 46 | 77 | n/a |
| Realised gains/losses on disposal of Available-for-sale debt securities | n/a | n/a | 64 |
| Impairments of Available-for-sale debt securities | n/a | n/a | |
| Reversal of impairments of Available-for-sale debt securities | n/a | n/a | 3 |
| Realised gains/losses and impairments of debt instruments measured at FVOCI | **46** | **77** | **67** |
| | | | |
| Realised gains/losses on disposal of Available-for-sale equity securities | n/a | n/a | 48 |
| Impairments of Available-for-sale equity securities | n/a | n/a | –6 |
| Realised gains/losses and impairments of Available-for-sale equity securities | **n/a** | **n/a** | **42** |
| | | | |
| Income from and fair value gains/losses on investment properties | 27 | 4 | 3 |
| Investment income | **188** | **183** | **192** |

1 The adoption of IFRS 9 led to new presentation requirements for 2019 and 2018; 2017 period amounts have not been restated.

In 2019, 2018 and 2017, Dividend income mainly consists of dividend received from ING's equity stake in Bank of Beijing.

Impairments and reversals of impairments on investments are presented within Investment income, which is part of Total income.

## 25 Result on disposal of group companies

**Result on disposal of group companies**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Baring Private Equity Partners | | | 1 |
| ING Lease Italy | –2 | –123 | |
| ING Mauritius | 119 | | |
| | **117** | **–123** | **1** |

In 2019 the Result on disposal of group companies is mainly impacted by the sale of ING's stake in Kotak Mahindra Bank by ING Mauritius during 1Q 2019. ING Mauritius is in the process of being liquidated and consequently the release of the currency translation reserve (CTA) and the release of the Net Investment Foreign Entities reserve resulted in a one-off gain of EUR 119 million.

The Result on disposal of group companies includes the result (fair value less cost to sell) on the sale of part of the ING Lease Italy business amounting to EUR -123 million, which was recognized in 2018 and a final result of EUR -2 million recognized in 2019.

In 2017 the Result on disposal of group companies included realised deferred profits on divestments in prior periods related to Baring Private Equity Partners.

## 26 Other income

In 2019 Other income of EUR 252 million (2018: EUR 136 million; 2017: EUR 350 million) includes the recognition of a EUR 79 million receivable related to the insolvency of a financial institution.

Furthermore, Other income includes income from subleasing right of use assets and gains or losses from sale and lease back transactions amounting to EUR 5 million as well as income from positive recovery of defaulted receivables of EUR 32 million. The remainder of the Other income is mainly impacted by positive results on the sale of loans and property and various other non-recurring results.

In 2017 an amount of EUR 121 million is included related to a tax charge at ING Australia Holdings Ltd, for which a full reimbursement is expected to be received from NN Group.

## 27 Staff expenses

**Staff expenses**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Salaries | 3,572 | 3,287 | 3,273 |
| Pension costs and other staff-related benefit costs | 366 | 385 | 381 |
| Social security costs | 530 | 509 | 499 |
| Share-based compensation arrangements | 41 | 49 | 74 |
| External employees | 974 | 901 | 716 |
| Education | 64 | 87 | 76 |
| Other staff costs | 208 | 202 | 183 |
| | **5,755** | **5,420** | **5,202** |

**Number of employees**

| | Netherlands | | | International | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Total average number of internal employees at full time equivalent basis | **14,415** | 13,600 | 13,141 | **39,016** | 38,633 | 38,363 | **53,431** | 52,233 | 51,504 |

Share-based compensation arrangements include EUR 38 million (2018: EUR 46 million; 2017: EUR 69 million) relating to equity-settled share-based payment arrangements and EUR 3 million (2018: EUR 3 million; 2017: EUR 5 million) relating to cash-settled share-based payment arrangements.

**Remuneration of senior management, Executive Board and Supervisory Board**

Reference is made to Note 50 ‘Related parties’.

### Stock option and share plans

ING Groep N.V. has granted option rights on ING Groep N.V. shares and conditional rights on shares to a number of senior executives (members of the Executive Board, general managers and other officers nominated by the Executive Board), and to a considerable number of employees of ING Group. The purpose of the option and share schemes, apart from promoting a lasting growth of ING Group, is to attract, retain and motivate senior executives and staff.

ING grants four types of share awards, deferred shares, performance shares and upfront shares, which form part of the variable remuneration offering via the Long term Sustainable Performance Plan (LSPP), as well as fixed shares. The entitlement to the LSPP share awards is granted conditionally. If the participant remains in employment for an uninterrupted period between the grant date and the vesting date, the entitlement becomes unconditional, with the exception of the upfront shares which are immediately vested upon grant. Additionally, a condition before vesting was applied to performance shares until 2018. As of 2019, this performance condition is no longer applicable. Upfront and deferred shares awarded to the Management Board members of ING Group as well as identified staff, have a retention obligation that must be adhered to upon vesting, a minimum retention of 12 months applies. ING has the authority to apply a hold back to awarded but unvested shares and a claw-back to vested shares.

In addition to the LSPP share awards, ING also pays a number of senior employees fixed shares. The number of shares are determined each month from a cash value that forms part of the employee fixed remuneration. The shares are immediately vested to the employee, but have a minimum holding requirement of two years before the employee can dispose of the shares. The fixed shares are not subject to holdback or clawback.

The share awards granted in 2019 relate to the performance year 2018. In 2019, no share awards (2018: 31,743; 2017: 54,768) were granted to the members of the Executive Board of ING Groep N.V., and 2,837 share awards (2018: 80,036; 2017: 104,449) were granted to the Management Board Banking (related to pre-board service period). To senior management and other employees 2,167,817 share awards (2018: 3,989,214; 2017: 4,846,903) were granted.

Every year, the ING Group Executive Board decides whether the option and share schemes are to be continued and, if so, to what extent. In 2010, the Group Executive Board decided not to continue the option scheme as from 2011. The existing option schemes will run off in the coming year as the option rights will expire in 2020.

The option rights are valid for a period of ten years. Option rights that are not exercised within this period, lapse. Option rights granted will remain valid until the expiry date, even if the option scheme is discontinued. The option rights are subject to certain conditions, including a pre-determined continuous period of service. The exercise prices of the options are the same as the quoted prices of ING Groep N.V. shares at the date on which the options are granted.

The obligations with regard to the existing stock option plan and the share plans will be funded either by cash or by newly issued shares at the discretion of ING Group.

## Changes in option rights outstanding

| | Options outstanding (in numbers) | | | Weighted average exercise price (in euros) | | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Opening balance | 5,123,853 | 15,141,980 | 25,574,912 | 5.69 | 12.36 | 15.53 |
| Exercised | –2,186,316 | –827,755 | –2,216,764 | 4.40 | 5.91 | 5.89 |
| Forfeited | –45,852 | –89,816 | –168,007 | 7.01 | 8.09 | 14.26 |
| Expired | –535,342 | –9,100,556 | –8,048,161 | 3.51 | 16.75 | 24.18 |
| Closing balance | **2,356,343** | **5,123,853** | **15,141,980** | **7.35** | 5.69 | 12.36 |

As per 31 December 2019, total options outstanding consists of 1,733,349 options (2018: 3,754,976; 2017: 10,156,219) relating to equity-settled share-based payment arrangements and 622,994 options (2018: 1,368,877; 2017: 4,985,761) relating to cash-settled share-based payment arrangements.

The weighted average share price at the date of exercise for options exercised during 2019 is EUR 10.89 (2018: EUR 13.65; 2017: 13.81). All option rights are vested.

## Summary of stock options outstanding and exercisable

| | Options outstanding and exercisable as at 31 December | | | Weighted average remaining contractual life | | | Weighted average exercise price | | |
|---|---|---|---|---|---|---|---|---|---|
| Range of exercise price in euros | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| 0.00 – 5.00 | | 1,930,068 | 2,294,423 | | 0.21 | 1.21 | | 2.88 | 2.88 |
| 5.00 – 10.00 | 2,356,343 | 3,193,785 | 3,754,542 | 0.22 | 1.21 | 2.21 | 7.35 | 7.38 | 7.38 |
| 10.00 – 15.00 | | | 110,086 | | | 0.71 | | | 14.35 |
| 15.00 – 20.00 | | | 8,982,929 | | | 0.21 | | | 16.84 |
| | **2,356,343** | **5,123,853** | **15,141,980** | | | | | | |

All options outstanding are exercisable. As at 31 December 2019, the aggregate intrinsic value of options outstanding and exercisable is EUR 8 million (2018: EUR 19 million; 2017: EUR 59 million).

Cash received from stock option exercises for the year ended 31 December 2019 is EUR 7 million (2018: EUR 4 million; 2017: EUR 10 million).

**Changes in share awards**

| | Share awards (in numbers) | | | Weighted average grant date fair value (in euros) | | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Opening balance | 5,854,999 | 7,222,279 | 8,382,963 | 11.62 | 11.46 | 10.44 |
| Granted | 2,170,654 | 4,100,993 | 5,006,120 | 10.04 | 12.50 | 13.20 |
| Performance effect | – | 341,623 | 379,934 | 11.12 | 11.65 | 10.47 |
| Vested | –3,945,020 | –5,565,093 | –6,328,318 | 11.23 | 12.05 | 11.40 |
| Forfeited | –223,585 | –244,803 | –218,420 | 11.39 | 11.52 | 10.83 |
| Closing balance | **3,857,048** | **5,854,999** | **7,222,279** | 11.14 | 11.62 | 11.46 |

As at 31 December 2019 the share awards consists of 3,346,004 share awards (2018: 5,211,339; 2017: 6,416,705) relating to equity-settled share-based payment arrangements and 511,044 share awards (2018: 643,660; 2017: 805,574) relating to cash-settled share-based payment arrangements.

The fair value of share awards granted is recognised as an expense under Staff expenses and is allocated over the vesting period of the share awards. The fair value calculation takes into account the current stock prices, expected volatilities and the dividend yield of ING shares.

As at 31 December 2019, total unrecognised compensation costs related to share awards amount to EUR 15 million (2018: EUR 29 million; 2017: EUR 37 million). These costs are expected to be recognised over a weighted average period of 1.4 years (2018: 1.4 years; 2017: 1.4 years).

## 28 Other operating expenses

**Other operating expenses**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Regulatory costs | 1,021 | 947 | 901 |
| Audit and non-audit services | 30 | 26 | 22 |
| IT related expenses | 759 | 779 | 737 |
| Advertising and public relations | 391 | 402 | 455 |
| External advisory fees | 416 | 358 | 353 |
| Office expenses | 325 | 564 | 587 |
| Travel and accommodation expenses | 140 | 179 | 178 |
| Contributions and subscriptions | 108 | 91 | 91 |
| Postal charges | 46 | 54 | 50 |
| Depreciation of property and equipment[1] | 551 | 312 | 319 |
| Amortisation of intangible assets | 237 | 209 | 179 |
| Impairments and reversals on property and equipment and intangibles | 59 | 19 | 18 |
| Addition/(unused amounts reversed) of provision for reorganisations | 6 | 4 | –5 |
| Addition/(unused amounts reversed) of other provisions | 29 | –13 | 167 |
| Other | 477 | 1,332 | 575 |
| | **4,598** | **5,262** | **4,627** |

1 Includes depreciation expenses of right-of use assets as recognised under IFRS 16.

### Regulatory costs

Regulatory costs represent contributions to the Deposit Guarantee Schemes (DGS), The Single Resolution Fund (SRF), local bank taxes and local resolution funds. Included in Regulatory costs for 2019, are contributions to DGS of EUR 362 million (2018: EUR 364 million; 2017: EUR 341 million) mainly related to the Netherlands, Germany, Belgium, Poland, and Spain and contributions to the SRF and local resolution funds of EUR 239 million (2018: EUR 208 million; 2017: EUR 179 million). In 2019 local bank taxes increased by EUR 45 million from EUR 375 million in 2018 to EUR 420 million (2017: EUR 381 million).

## Audit and non-audit services

Total audit and non-audit services include the following fees for services provided by the Group's auditor.

**Fees of Group's auditor**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Audit fees | 21 | 19 | 18 |
| Audit related fees | 2 | 1 | 1 |
| Total [1] | **23** | **20** | **19** |

1 The Group's auditors did not provide any non-audit services

Fees as disclosed in the table above relate to the network of the Group's auditors and are the amounts related to the respective years, i.e. on an accrual basis. The increase in audit fees 2019 primarily relates to audit activities for the implementation of IFRS 16, new statutory audits and new IT systems in scope.

## Tangible and Intangible impairments and reversals

**Impairments and reversals of property and equipment and intangibles**

| | Impairment losses | | | Reversals of impairments | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Property and equipment | 4 | 9 | 10 | –6 | –17 | –24 | –3 | –8 | –14 |
| Property development | 1 | 15 | 2 | | | | 1 | 15 | 2 |
| Software and other intangible assets | 61 | 12 | 30 | –0 | | | 61 | 12 | 30 |
| (Reversals of) other impairments | **66** | **35** | **42** | **–7** | **–17** | **–24** | **59** | **19** | **18** |

Impairment losses on software and intangible assets in 2019 relate to rescoping of IT transformation programs. 2018 and 2017 impairments include software that was impaired to its Value in Use, related to the acceleration of the Think Forward Strategy.

In 2018, impairment losses on property development mainly relate to impairments in Spain and Italy due to lower expected Net Realizable Values.

The reversals of impairments on property and equipment in both 2018 and 2017 relate to impairments previously recognised in the statement of profit or loss and mainly include impairments on property in own use that were reversed following the sale process of office buildings.

## Addition/(unused amounts reversed) of provision for reorganisations

Included in Addition/(unused amounts reversed) provision for reorganisations in 2019, is an increase in relation to the reorganisation relating to ING's Agile transformation in Germany. Reference is made to Note 16 'Provisions'.

## Addition/(unused amounts reversed) of other provisions

Included in Addition/(unused amounts reversed) of other provisions in 2019, are movements mainly in the litigation provision. Reference is made to Note 16 'Provisions' and Note 46 'Legal proceedings'.

## Other

In 2018 Other operating expenses - Other included, amongst others, the settlement with the Dutch Public Prosecution Service of EUR 775 million. The settlement related to previously disclosed investigations regarding various requirements for client on-boarding and the prevention of money laundering and corrupt practices. Reference is made to Note 46 'Legal proceedings'.

## 29 Earnings per ordinary share

**Earnings per ordinary share**

| | Amount | | | Weighted average number of ordinary shares outstanding during the period | | | Per ordinary share | | |
|---|---|---|---|---|---|---|---|---|---|
| | (in EUR million) | | | (in millions) | | | (in EUR) | | |
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Basic earnings | 4,781 | 4,703 | 4,905 | 3,894.8 | 3,888.9 | 3,882.8 | 1.23 | 1.21 | 1.26 |
| Basic earnings from continuing operations | **4,781** | **4,703** | **4,905** | | | | **1.23** | **1.21** | **1.26** |
| | | | | | | | | | |
| Effect of dilutive instruments: | | | | | | | | | |
| Stock option and share plans | | | | 0.5 | 1.5 | 2.8 | | | |
| | | | | **0.5** | **1.5** | **2.8** | | | |
| | | | | | | | | | |
| Diluted earnings | 4,781 | 4,703 | 4,905 | 3,895.3 | 3,890.4 | 3,885.6 | 1.23 | 1.21 | 1.26 |
| Diluted earnings from continuing operations | **4,781** | **4,703** | **4,905** | | | | **1.23** | **1.21** | **1.26** |

### Dilutive instruments

Diluted earnings per share is calculated as if the stock options and share plans outstanding at the end of the period had been exercised at the beginning of the period and assuming that the cash received from exercised stock options and share plans is used to buy own shares against the average market price during the period. The net increase in the number of shares resulting from exercising stock options and share plans is added to the average number of shares used for the calculation of diluted earnings per share.

## 30 Dividend per ordinary share

**Dividends to shareholders of the parent**

| | Per ordinary share (in EUR) | Total (in EUR million) |
|---|---|---|
| Dividends on ordinary shares: | | |
| In respect of 2017 | | |
| - Interim dividend, paid in cash in August 2017 | 0.24 | 933 |
| - Final dividend, paid in cash in May 2018 | 0.43 | 1,670 |
| Total dividend in respect of 2017 | **0.67** | **2,603** |
| In respect of 2018 | | |
| - Interim dividend, paid in cash in August 2018 | 0.24 | 934 |
| - Final dividend, paid in cash in May 2019 | 0.44 | 1,714 |
| Total dividend in respect of 2018 | **0.68** | **2,648** |
| In respect of 2019 | | |
| - Interim dividend, paid in cash in August 2019 | 0.24 | 935 |
| - Final dividend declared | 0.45 | 1,754 |
| Total dividend in respect of 2019 | **0.69** | **2,689** |

ING Groep N.V. is required to withhold tax of 15% on dividends paid.

## 31 Net cash flow from operating activities

The table below shows a detailed overview of the net cash flow from operating activities.

**Cash flows from operating activities**

| in EUR million | | 2019 | 2018 | 2017 |
|---|---|---|---|---|
| **Cash flows from operating activities** | | | | |
| **Result before tax** | | 6,834 | 6,838 | 7,268 |
| Adjusted for: | – Depreciation and amortisation | 789 | 520 | 520 |
| | – Addition to loan loss provisions | 1,120 | 656 | 676 |
| | – Other non-cash items included in Result before tax | 32 | –1,763 | 703 |
| Taxation paid | | –2,345 | –1,602 | –1,691 |
| Changes in: | – Loans and advances to banks, not available on demand | –1,338 | –777 | –3,126 |
| | – Deposits from banks, not payable on demand | –2,574 | 566 | 6,320 |
| | Net change in loans and advances to/ from banks, not available/ payable on demand | **–3,911** | **–211** | **3,194** |
| | – Trading assets | 605 | 16,928 | –1,612 |
| | – Trading liabilities | –3,173 | –7,018 | –9,575 |
| | Net change in Trading assets and Trading liabilities | **–2,568** | **9,910** | **–11,187** |
| | Loans and advances to customers | –16,687 | –31,253 | –20,505 |
| | Customer deposits | 18,040 | 19,753 | 18,223 |
| | – Non-trading derivatives | 1,072 | –215 | –2,239 |
| | – Assets designated at fair value through profit or loss | –7 | –725 | 441 |
| | – Assets mandatorily at fair value through profit or loss | 23,343 | -6,968 | n/a |
| | – Other assets | 1,363 | 684 | –430 |
| | – Other financial liabilities at fair value through profit or loss | –12,235 | 10,522 | –565 |
| | – Provisions and other liabilities | –1,784 | 769 | 339 |
| | Other | **11,752** | **4,067** | **–2,454** |
| **Net cash flow from/(used in) operating activities** | | **13,055** | **6,915** | **–5,253** |

## 32 Changes in liabilities arising from financing activities

**Changes in liabilities arising from financing activities**

| | Debt securities in issue | | Subordinated Loans | | Lease liabilities | | Total Liabilities from financing activities | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 119,751 | 96,086 | 13,724 | 15,968 | n/a | n/a | 133,475 | 112,054 |
| Effect of change in accounting policy due to the implementation of IFRS 9/16 | | 740 | | 241 | 1,301 | | 1,301 | 981 |
| **Cashflows:** | | | | | | | | |
| Additions | 90,793 | 152,543 | 3,429 | 1,859 | | | 94,222 | 154,402 |
| Redemptions / Disposals | –94,497 | –131,170 | –933 | –4,646 | –271 | | –95,700 | –135,816 |
| **Non cash changes:** | | | | | | | | |
| Amortisation | 135 | 85 | 1 | 13 | 25 | | 161 | 98 |
| Other | 21 | –0 | 26 | – | 443 | | 490 | –0 |
| Changes in FV | 1,018 | –53 | 201 | –73 | | | 1,220 | –126 |
| Foreign exchange movement | 1,306 | 1,521 | 140 | 362 | 8 | | 1,454 | 1,883 |
| Closing balance | **118,528** | **119,751** | **16,588** | **13,724** | **1,507** | **n/a** | **136,622** | **133,475** |

## 33 Cash and cash equivalents

**Cash and cash equivalents**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Treasury bills and other eligible bills | 43 | 159 | 391 |
| Deposits from banks/Loans and advances to banks | 786 | –2,617 | –3,403 |
| Cash and balances with central banks | 53,202 | 49,987 | 21,989 |
| Cash and cash equivalents at end of year | **54,031** | **47,529** | **18,977** |

**Treasury bills and other eligible bills included in cash and cash equivalents**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Treasury bills and other eligible bills included in trading assets | 0 | 17 | 5 |
| Treasury bills and other eligible bills included in AFS investments | n/a | n/a | 386 |
| Treasury bills and other eligible bills included in FVOCI | | -0 | n/a |
| Treasury bills and other eligible bills included in securities at AC | 43 | 142 | n/a |
| | **43** | **159** | **391** |

**Deposits from banks/Loans and advances to banks**

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Included in cash and cash equivalents: | | | |
| – Deposits from banks | -8,519 | -8,520 | -8,563 |
| – Loans and advances to banks | 9,304 | 5,903 | 5,160 |
| | **786** | **–2,617** | **–3,403** |
| Not included in cash and cash equivalents: | | | |
| – Deposits from banks | -26,307 | -28,811 | -28,258 |
| – Loans and advances to banks | 25,832 | 24,519 | 23,651 |
| | **–476** | **–4,292** | **–4,607** |
| Total as included in the statement of financial position: | | | |
| – Deposits from banks | -34,826 | -37,330 | -36,821 |
| – Loans and advances to banks | 35,136 | 30,422 | 28,811 |
| | **310** | **–6,909** | **–8,010** |

Cash and cash equivalents includes deposits from banks and loans and advances to banks that are on demand.

Included in Cash and cash equivalents, are minimum mandatory reserve deposits to be held with various central banks. Reference is made to Note 42 ‘Assets not freely disposable’ for restrictions on Cash and balances with central banks.

# Segment reporting

## 34 Segments

### a. General

ING Group’s segments are based on the internal reporting structures by lines of business.

The Executive Board of ING Group and the Management Board Banking set the performance targets, approve and monitor the budgets prepared by the business lines. Business lines formulate strategic, commercial, and financial plans in conformity with the strategy and performance targets set by the Executive Board of ING Group and the Management Board Banking.

Recognition and measurement of segment results are in line with the accounting policies as described in Note 1 ‘Accounting policies’. Corporate expenses are allocated to business lines based on time spent by head office personnel, the relative number of staff, or on the basis of income, expenses and/or assets of the segment.

The following table specifies the segments by line of business and the main sources of income of each of the segments:

**Specification of the main sources of income of each of the segments by line of business**

| Segments of the Banking results by line of business | Main source of income |
|---|---|
| Retail Netherlands<br>*(Market Leaders)* | Income from retail and private banking activities in the Netherlands, including the SME and mid-corporate segments, and the Real Estate Finance portfolio related to Dutch domestic mid-corporates. The main products offered are current and savings accounts, business lending, mortgages and other consumer lending in the Netherlands. |
| Retail Belgium<br>*(Market Leaders)* | Income from retail and private banking activities in Belgium (including Luxembourg), including the SME and mid-corporate segments. The main products offered are similar to those in the Netherlands. |
| Retail Germany<br>*(Challengers & Growth Markets)* | Income from retail and private banking activities in Germany (including Austria). The main products offered are current and savings accounts, mortgages and other customer lending. |
| Retail Other<br>*(Challengers & Growth Markets)* | Income from retail banking activities in the rest of the world, including the SME and mid-corporate segments in specific countries. The main products offered are similar to those in the Netherlands. |
| Wholesale Banking | Income from wholesale banking activities. The main activities are: lending, debt capital markets, working capital solutions, export finance, daily banking solutions, treasury and risk solutions, and corporate finance. |

As of 1 January 2019, the Real Estate Finance portfolio related to Dutch domestic mid-corporates, which was included under Wholesale Banking, has been transferred to Retail Netherlands in order to define clearer roles and responsibilities. The presentation of previously reported underlying profit and loss amounts has been adjusted to reflect this change.

The geographical segments for the Banking results are presented on page 325.

**Specification of geographical segments**

| Geographical segments | Main countries |
|---|---|
| The Netherlands | |
| Belgium | Including Luxembourg |
| Germany | Including Austria |
| Other Challengers | Australia, France, Italy, Spain, Portugal, Czech Republic, and UK Legacy and Other |
| Growth Markets | Poland, Romania, Turkey, Philippines and Asian bank stakes |
| Wholesale Banking Rest of World | UK, Americas, Asia and other countries in Central and Eastern Europe |
| Other | Corporate Line Banking and the run-off portfolio of Real Estate |

ING Group evaluates the results of its banking segments using a financial performance measure called underlying result. Underlying result is used to monitor the performance of ING Group at a consolidated level and by segment. The Executive Board and the Management Board Banking consider this measure to be relevant to an understanding of the Group's financial performance, because it allows investors to understand the primary method used by management to evaluate the Group's operating performance and make decisions about allocating resources. In addition, ING Group believes that the presentation of underlying net result helps investors compare its segment performance on a meaningful basis by highlighting result before tax attributable to ongoing operations and the underlying profitability of the segment businesses. Underlying result is derived by excluding from IFRS the following: special items, the impact of divestments and Insurance Other

Special items include items of income or expense that are significant and arise from events or transactions that are clearly distinct from the regular operating activities. Disclosures on comparative periods also reflect the impact of divestments. Insurance Other reflects (former) insurance related activities that are not part of the discontinued operations.

ING Group reconciles the total segment results to the total result of Banking using Corporate Line Banking. The Corporate Line Banking is a reflection of capital management activities and certain income and expenses that are not allocated to the banking businesses, including a higher VAT refund in 2019 as well as a EUR 119 million gain from the release of a currency translation reserve following the sale of ING's stake in Kotak Mahindra Bank and the recognition of a EUR 79 million receivable related to the insolvency of a financial institution (both recorded under income). Furthermore, the Corporate Line Banking includes the isolated legacy costs (mainly negative interest results) caused by the replacement of short-term funding with long-term funding during 2013 and 2014. ING Group applies a system of capital charging for its banking operations in order to create a comparable basis for the results of business units globally, irrespective of the business units' book equity and the currency they operate in.

Underlying result as presented below is a non-GAAP financial measure and is not a measure of financial performance under IFRS. Because underlying result is not determined in accordance with IFRS, underlying result as presented by ING may not be comparable to other similarly titled measures of performance of other companies. The underlying result of ING's segments is reconciled to the net result as reported in the IFRS Consolidated statement of profit or loss below. The information presented in this note is in line with the information presented to the Executive Board of ING Group and Management Board Banking.

This note does not provide information on the revenue specified to each product or service as this is not reported internally and is therefore not readily available.

## b. ING Group

**Reconciliation between IFRS and Underlying income, expenses and net result**

| | 2019 | | | | | 2018 | | | | | 2017 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Income | Expenses | Taxation | Non-controlling interests | Net result [1] | Income | Expenses | Taxation | Non-controlling interests | Net result [1] | Income | Expenses | Taxation | Non-controlling interests | Net result [1] |
| Net result IFRS attributable to equity holder of the parent | 18,306 | 11,472 | 1,955 | 99 | 4,781 | 18,176 | 11,338 | 2,027 | 108 | 4,703 | 17,773 | 10,505 | 2,281 | 82 | 4,905 |
| | | | | | | | | | | | | | | | |
| Remove impact of: | | | | | | | | | | | | | | | |
| Special items [2] | | | | | | | –775 | | | 775 | –121 | | –121 | | 0 |
| Insurance Other [3] | | | | | | –89 | | 1 | | –90 | 53 | | 1 | | 52 |
| **Underlying [4]** | **18,306** | **11,472** | **1,955** | **99** | **4,781** | **18,088** | **10,563** | **2,028** | **108** | **5,389** | **17,704** | **10,505** | **2,160** | **82** | **4,957** |

1 Net result, after tax and non-controlling interests.
2 Special items in 2018 comprised a settlement agreement with the Dutch authorities on regulatory issues as announced on 4 September 2018.
Special items in 2017 comprised a tax charge at ING Australia Holdings Ltd related to the years 2013-2017, for which a full reimbursement is expected to be received from NN Group.
3 Insurance Other comprises the net result relating to warrants on the shares of Voya Financial and NN Group. In March 2018 ING sold it's remaining part of warrants on the shares of Voya Financial. In November 2018 the warrant agreement between NN Group and ING was terminated.
4 Underlying figures are derived from figures according to IFRS by excluding the impact of divestments, special items and Insurance Other.

## ING Group Total

| | 2019 | | | | | 2018 | | | | | 2017 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ING Bank N.V. | Other Banking[1] | Total Banking | Legacy Insurance | Total | ING Bank N.V. | Other Banking[1] | Total Banking | Legacy Insurance | Total | ING Bank N.V. | Other Banking[1] | Total Banking | Legacy Insurance | Total |
| Underlying income | | | | | | | | | | | | | | | |
| Net interest income | 14,074 | 4 | 14,079 | | 14,079 | 13,949 | –34 | 13,916 | | 13,916 | 13,782 | –68 | 13,714 | | 13,714 |
| Net fee and commission income | 2,868 | –0 | 2,868 | | 2,868 | 2,803 | –0 | 2,803 | | 2,803 | 2,714 | | 2,714 | | 2,714 |
| Total investment and other income | 1,352 | 8 | 1,360 | | 1,360 | 1,350 | 19 | 1,369 | | 1,369 | 1,259 | 17 | 1,277 | | 1,277 |
| Total underlying income | **18,295** | **12** | **18,306** | | **18,306** | **18,102** | **–15** | **18,088** | | **18,088** | **17,755** | **–51** | **17,704** | | **17,704** |
| | | | | | | | | | | | | | | | |
| Underlying expenditure | | | | | | | | | | | | | | | |
| Operating expenses | 10,343 | 9 | 10,353 | | 10,353 | 9,920 | –13 | 9,907 | | 9,907 | 9,795 | 34 | 9,829 | | 9,829 |
| Additions to loan loss provision | 1,120 | 0 | 1,120 | | 1,120 | 656 | 0 | 656 | | 656 | 676 | | 676 | | 676 |
| Total underlying expenses | **11,463** | **9** | **11,472** | | **11,472** | **10,576** | **–13** | **10,563** | | **10,563** | **10,742** | **34** | **10,505** | | **10,505** |
| | | | | | | | | | | | | | | | |
| **Underlying result before taxation** | **6,831** | **3** | **6,834** | | **6,834** | **7,526** | **–2** | **7,524** | | **7,524** | **7,283** | **–84** | **7,199** | | **7,199** |
| Taxation | 1,889 | 66 | 1,955 | | 1,955 | 2,036 | –8 | 2,028 | | 2,028 | 2,182 | –22 | 2,160 | | 2,160 |
| Non-controlling interests | 99 | | 99 | | 99 | 108 | | 108 | | 108 | 82 | | 82 | | 82 |
| **Underlying net result** | **4,843** | **–63** | **4,781** | | **4,781** | **5,382** | **6** | **5,389** | | **5,389** | **5,019** | **–62** | **4,957** | | **4,957** |
| Special items | | | | | | –775 | | –775 | | –775 | 0 | | 0 | | 0 |
| Insurance Other | | | | | | | | | 90 | 90 | | | | –52 | –52 |
| **Net result IFRS attributable to equity holder of the parent** | **4,843** | **–63** | **4,781** | | **4,781** | **4,607** | **6** | **4,614** | **90** | **4,703** | **5,019** | **–62** | **4,957** | **–52** | **4,905** |

1 Comprises for the most part capital management activities of ING Groep N.V. (Holding).

## c. Banking activities

### Segments Banking by line of business

**2019**

| | Retail Nether-lands | Retail Belgium | Retail Germany | Retail Other | Wholesale Banking | Corporate Line Banking | Total Banking |
|---|---|---|---|---|---|---|---|
| Underlying income | | | | | | | |
| – Net interest income | 3,541 | 1,907 | 1,579 | 2,787 | 3,794 | 470 | 14,079 |
| – Net fee and commission income | 674 | 374 | 268 | 423 | 1,135 | –6 | 2,868 |
| – Total investment and other income | 290 | 161 | 138 | 298 | 369 | 103 | 1,360 |
| Total underlying income | **4,505** | **2,442** | **1,985** | **3,509** | **5,298** | **568** | **18,306** |
| | | | | | | | |
| Underlying expenditure | | | | | | | |
| – Operating expenses | 2,210 | 1,609 | 1,080 | 2,210 | 2,937 | 307 | 10,353 |
| – Additions to loan loss provision | 91 | 186 | –53 | 364 | 532 | –0 | 1,120 |
| Total underlying expenses | **2,301** | **1,794** | **1,027** | **2,574** | **3,469** | **307** | **11,472** |
| | | | | | | | |
| **Underlying result before taxation** | **2,204** | **647** | **957** | **935** | **1,830** | **261** | **6,834** |
| Taxation | 558 | 192 | 328 | 234 | 464 | 179 | 1,955 |
| Non-controlling interests | –0 | 0 | 3 | 82 | 14 | –0 | 99 |
| **Underlying net result** | **1,646** | **455** | **627** | **619** | **1,352** | **82** | **4,781** |
| Special items | | | | | | | |
| **Net result IFRS** | **1,646** | **455** | **627** | **619** | **1,352** | **82** | **4,781** |

**2018**

| | Retail Nether-lands[1] | Retail Belgium | Retail Germany | Retail Other | Wholesale Banking[1] | Corporate Line Banking | Total Banking |
|---|---|---|---|---|---|---|---|
| Underlying income | | | | | | | |
| – Net interest income | 3,749 | 1,830 | 1,671 | 2,690 | 3,686 | 290 | 13,916 |
| – Net fee and commission income | 664 | 371 | 225 | 395 | 1,152 | –4 | 2,803 |
| – Total investment and other income | 335 | 169 | 76 | 230 | 673 | –113 | 1,369 |
| Total underlying income | **4,747** | **2,369** | **1,972** | **3,315** | **5,510** | **173** | **18,088** |
| | | | | | | | |
| Underlying expenditure | | | | | | | |
| – Operating expenses | 2,220 | 1,610 | 1,027 | 2,033 | 2,771 | 247 | 9,907 |
| – Additions to loan loss provision | –41 | 164 | –27 | 350 | 210 | –1 | 656 |
| Total underlying expenses | **2,179** | **1,774** | **1,000** | **2,383** | **2,981** | **246** | **10,563** |
| | | | | | | | |
| **Underlying result before taxation** | **2,568** | **595** | **972** | **932** | **2,529** | **–72** | **7,524** |
| Taxation | 626 | 199 | 324 | 200 | 633 | 47 | 2,028 |
| Non-controlling interests | –0 | 6 | 3 | 80 | 19 | –0 | 108 |
| **Underlying net result** | **1,942** | **390** | **646** | **652** | **1,877** | **–119** | **5,389** |
| Special items | | | | | | –775 | –775 |
| **Net result IFRS** | **1,942** | **390** | **646** | **652** | **1,877** | **–894** | **4,614** |

**2017**

| | Retail Nether-lands[1] | Retail Belgium | Retail Germany | Retail Other | Wholesale Banking[1] | Corporate Line Banking | Total Banking |
|---|---|---|---|---|---|---|---|
| Underlying income | | | | | | | |
| – Net interest income | 3,866 | 1,842 | 1,704 | 2,437 | 3,639 | 226 | 13,714 |
| – Net fee and commission income | 607 | 408 | 215 | 384 | 1,102 | –3 | 2,714 |
| – Total investment and other income | 256 | 224 | –28 | 207 | 919 | –301 | 1,277 |
| Total underlying income | **4,730** | **2,473** | **1,891** | **3,028** | **5,660** | **–78** | **17,704** |
| | | | | | | | |
| Underlying expenditure | | | | | | | |
| – Operating expenses | 2,260 | 1,584 | 1,032 | 1,919 | 2,744 | 290 | 9,829 |
| – Additions to loan loss provision | 15 | 104 | –10 | 284 | 282 | 1 | 676 |
| Total underlying expenses | **2,275** | **1,688** | **1,022** | **2,203** | **3,026** | **291** | **10,505** |
| | | | | | | | |
| **Underlying result before taxation** | **2,455** | **785** | **869** | **825** | **2,634** | **–369** | **7,199** |
| Taxation | 615 | 296 | 241 | 188 | 832 | –13 | 2,160 |
| Non-controlling interests | | –2 | 2 | 67 | 15 | | 82 |
| **Underlying net result** | **1,839** | **491** | **625** | **569** | **1,788** | **–356** | **4,957** |
| Special items | | | | | | 0 | 0 |
| **Net result IFRS** | **1,839** | **491** | **625** | **569** | **1,788** | **–356** | **4,957** |

1 In 2019, the Dutch domestic midcorporates real estate finance portfolio transferred from Wholesale Banking to Retail Banking Netherlands. Comparative figures have been adjusted.

## Geographical segments Banking

**2019**

| | Netherlands | Belgium | Germany | Other Challengers | Growth markets | Wholesale Banking Rest of World | Other | Total Banking |
|---|---|---|---|---|---|---|---|---|
| Underlying income | | | | | | | | |
| – Net interest income | 4,213 | 2,233 | 2,122 | 1,808 | 1,606 | 1,636 | 461 | 14,079 |
| – Net fee and commission income | 994 | 533 | 315 | 283 | 299 | 451 | –7 | 2,868 |
| – Total investment and other income | 119 | 233 | 169 | 16 | 411 | 301 | 111 | 1,360 |
| Total underlying income | **5,325** | **2,999** | **2,606** | **2,107** | **2,316** | **2,388** | **566** | **18,306** |
| | | | | | | | | |
| Underlying expenditure | | | | | | | | |
| – Operating expenses | 2,994 | 1,925 | 1,237 | 1,318 | 1,261 | 1,309 | 308 | 10,353 |
| – Additions to loan loss provision | 146 | 268 | –40 | 171 | 271 | 303 | –0 | 1,120 |
| Total underlying expenses | **3,140** | **2,194** | **1,197** | **1,489** | **1,533** | **1,612** | **308** | **11,472** |
| | | | | | | | | |
| **Underlying result before taxation** | **2,185** | **805** | **1,409** | **618** | **784** | **776** | **258** | **6,834** |
| Taxation | 549 | 247 | 476 | 207 | 166 | 137 | 173 | 1,955 |
| Non-controlling interests | –0 | 0 | 3 | | 96 | | –0 | 99 |
| **Underlying net result** | **1,637** | **558** | **929** | **411** | **521** | **639** | **85** | **4,781** |
| Special items | | | | | | | | |
| **Net result IFRS** | **1,637** | **558** | **929** | **411** | **521** | **639** | **85** | **4,781** |

**2018**

| | Netherlands | Belgium[1] | Germany | Other Challengers | Growth markets | Wholesale Banking Rest of World[1] | Other | Total Banking |
|---|---|---|---|---|---|---|---|---|
| Underlying income | | | | | | | | |
| – Net interest income | 4,374 | 2,137 | 2,200 | 1,732 | 1,639 | 1,548 | 285 | 13,916 |
| – Net fee and commission income | 980 | 520 | 273 | 254 | 297 | 482 | –4 | 2,803 |
| – Total investment and other income | 509 | 379 | 99 | –92 | 333 | 245 | –104 | 1,369 |
| Total underlying income | **5,863** | **3,037** | **2,572** | **1,895** | **2,269** | **2,274** | **177** | **18,088** |
| | | | | | | | | |
| Underlying expenditure | | | | | | | | |
| – Operating expenses | 2,929 | 1,932 | 1,171 | 1,217 | 1,175 | 1,222 | 263 | 9,907 |
| – Additions to loan loss provision | –65 | 153 | 6 | 163 | 274 | 126 | –1 | 656 |
| Total underlying expenses | **2,863** | **2,085** | **1,176** | **1,380** | **1,449** | **1,347** | **262** | **10,563** |
| | | | | | | | | |
| **Underlying result before taxation** | **3,000** | **952** | **1,396** | **515** | **820** | **927** | **–85** | **7,524** |
| Taxation | 741 | 291 | 459 | 178 | 143 | 174 | 43 | 2,028 |
| Non-controlling interests | 1 | 6 | 3 | | 98 | | –0 | 108 |
| **Underlying net result** | **2,258** | **655** | **935** | **337** | **580** | **753** | **–128** | **5,389** |
| Special items | | | | | | | –775 | –775 |
| **Net result IFRS** | **2,258** | **655** | **935** | **337** | **580** | **753** | **–903** | **4,614** |

**2017**

| | Netherlands | Belgium[1] | Germany | Other Challengers | Growth markets | Wholesale Banking Rest of World[1] | Other | Total Banking |
|---|---|---|---|---|---|---|---|---|
| Underlying income | | | | | | | | |
| – Net interest income | 4,537 | 2,110 | 2,172 | 1,527 | 1,515 | 1,625 | 227 | 13,714 |
| – Net fee and commission income | 871 | 521 | 269 | 232 | 316 | 507 | –3 | 2,714 |
| – Total investment and other income | 445 | 480 | –17 | 22 | 296 | 245 | –193 | 1,277 |
| Total underlying income | **5,853** | **3,111** | **2,424** | **1,781** | **2,127** | **2,377** | **31** | **17,704** |
| | | | | | | | | |
| Underlying expenditure | | | | | | | | |
| – Operating expenses | 2,930 | 2,071 | 1,154 | 1,142 | 1,126 | 1,105 | 301 | 9,829 |
| – Additions to loan loss provision | 3 | 160 | –15 | 201 | 241 | 85 | 1 | 676 |
| Total underlying expenses | **2,933** | **2,231** | **1,140** | **1,344** | **1,367** | **1,190** | **301** | **10,505** |
| | | | | | | | | |
| **Underlying result before taxation** | **2,920** | **880** | **1,285** | **437** | **760** | **1,188** | **–270** | **7,199** |
| Taxation | 708 | 369 | 407 | 145 | 151 | 379 | –1 | 2,160 |
| Non-controlling interests | | –2 | 2 | | 82 | | | 82 |
| **Underlying net result** | **2,212** | **512** | **875** | **292** | **527** | **808** | **–269** | **4,957** |
| Special items | | | | | | | 0 | 0 |
| **Net result IFRS** | **2,212** | **512** | **875** | **292** | **527** | **808** | **–269** | **4,957** |

1 As from 2019, financials of Nordics locations (which are managed from Brussels) transferred from 'Wholesale Banking Rest of World' to 'Belgium'. Comparative figures have been adjusted.

## 35 Information on geographical areas

ING Group's business lines operate in seven main geographical areas: the Netherlands, Belgium, Rest of Europe, North America, Latin America, Asia and Australia. A geographical area is a distinguishable component of the Group engaged in providing products or services within a particular economic environment that is subject to risks and returns that are different from those of geographical areas operating in other economic environments. The geographical analyses are based on the location of the office from which the transactions are originated. The Netherlands is ING Group's country of domicile.

The tables below provide additional information, for the years 2019, 2018 and 2017 respectively, on names of principal subsidiaries and branches, nature of main activities and average number of employees on a full time equivalent basis by country/tax jurisdiction.

### Additional information by country

| Geographical area | Country/Tax jurisdiction | Name of principal subsidiary | Main (banking) activity | Average number of employees at full time equivalent basis | | | Total Income | | | Total assets | | | Result before tax | | | Taxation | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| The Netherlands | Netherlands | ING Bank N.V. | Wholesale / Retail | 14,415 | 13,600 | 13,141 | 5,565 | 5,911 | 5,757 | 269,564 | 261,466 | 241,379 | 1,763 | 1,754 | 2,301 | 530 | 624 | 639 |
| Belgium | Belgium | ING België N.V. | Wholesale / Retail | 7,694 | 8,248 | 8,893 | 2,721 | 2,807 | 2,957 | 122,546 | 120,589 | 119,400 | 735 | 866 | 1,009 | 236 | 275 | 408 |
| | Luxemburg | ING Luxembourg S.A. | Wholesale / Retail | 841 | 791 | 777 | 322 | 315 | 298 | 16,634 | 13,313 | 14,748 | 153 | 198 | 68 | 37 | 50 | 27 |
| Rest of Europe | Poland | ING Bank Slaski S.A | Wholesale / Retail | 8,968 | 8,829 | 8,664 | 1,344 | 1,229 | 1,119 | 37,220 | 33,040 | 29,976 | 533 | 525 | 444 | 141 | 128 | 112 |
| | Germany | ING DiBa A.G. | Wholesale / Retail | 4,639 | 4,625 | 4,587 | 2,484 | 2,421 | 2,312 | 147,924 | 144,911 | 138,153 | 1,374 | 1,309 | 1,240 | 465 | 431 | 396 |
| | Romania | Branch of ING Bank N.V. | Wholesale / Retail | 2,575 | 2,269 | 1,968 | 457 | 403 | 314 | 7,424 | 7,112 | 5,940 | 221 | 183 | 135 | 34 | 25 | 23 |
| | Spain | Branch of ING Bank N.V. | Wholesale / Retail | 1,233 | 1,201 | 1,135 | 706 | 600 | 509 | 26,118 | 23,757 | 23,858 | 249 | 195 | 97 | 72 | 71 | 25 |
| | Italy | Branch of ING Bank N.V. | Wholesale / Retail | 959 | 911 | 838 | 269 | 231 | 336 | 15,726 | 16,991 | 16,728 | -39 | -101 | -4 | 4 | -24 | 7 |
| | UK | Branch of ING Bank N.V. | Wholesale | 692 | 672 | 603 | 594 | 505 | 550 | 61,088 | 64,016 | 78,573 | 214 | 180 | 324 | 52 | 44 | 76 |
| | France[1] | Branch of ING Bank N.V. | Wholesale / Retail | 659 | 620 | 591 | 302 | 323 | 310 | 12,053 | 12,063 | 10,678 | 63 | 111 | 93 | 33 | 45 | 32 |
| | Russia | ING Bank (Eurasia) Z.A.O. | Wholesale | 293 | 277 | 270 | 93 | 82 | 136 | 1,499 | 1,449 | 1,607 | 68 | 25 | 78 | 22 | 3 | 20 |
| | Czech Republic | Branch of ING Bank N.V. | Wholesale / Retail | 339 | 306 | 245 | 94 | 104 | 66 | 4,486 | 6,272 | 5,641 | 16 | 37 | 16 | 3 | 9 | 3 |
| | Hungary | Branch of ING Bank N.V. | Wholesale | 138 | 141 | 146 | 24 | 40 | 32 | 1,299 | 1,227 | 1,003 | -7 | 5 | | 2 | 3 | 2 |
| | Slovakia | Branch of ING Bank N.V. | Wholesale | 703 | 571 | 497 | 14 | 14 | 14 | 587 | 487 | 677 | 2 | | 2 | | 1 | 1 |
| | Ukraine | PJSC ING Bank Ukraine | Wholesale | 111 | 109 | 106 | 43 | 36 | 30 | 481 | 368 | 321 | 31 | 22 | 9 | 9 | 3 | 2 |
| | Austria | Branch of ING DiBa A.G. | Wholesale / Retail | 279 | 235 | 225 | 80 | 85 | 80 | 1,441 | 753 | 682 | | 18 | 25 | 1 | 6 | -1 |
| | Bulgaria | Branch of ING Bank N.V. | Wholesale | 68 | 69 | 70 | 12 | 9 | 9 | 358 | 360 | 268 | 2 | | -2 | | | |
| | Ireland | Branch of ING Bank N.V. | Wholesale | 48 | 47 | 43 | 71 | 68 | 57 | 2,575 | 2,868 | 2,337 | 58 | 65 | 47 | 8 | 8 | 6 |
| | Portugal | Branch of ING Bank N.V. | Wholesale | 12 | 11 | 11 | 18 | 18 | 14 | 899 | 905 | 667 | 14 | 13 | 9 | 4 | 4 | 3 |
| | Switzerland | Branch of ING België N.V. | Wholesale | 257 | 244 | 204 | 234 | 257 | 224 | 8,577 | 8,266 | 9,737 | 126 | 169 | 145 | -36 | 35 | 38 |

## Additional information by country (continued)

| Geographical area | Country/Tax jurisdiction | Name of principal subsidiary | Main (banking) activity | Average number of employees at full time equivalent basis | | | Total Income | | | Total assets | | | Result before tax | | | Taxation | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| North America | Canada | Payvision Canada Services Ltd. | Wholesale | 1 | 1 | | 3 | 3 | | 1 | 2 | 2 | | | | | | |
| | USA | ING Financial Holdings Corp. | Wholesale | 626 | 617 | 564 | 813 | 736 | 724 | 45,521 | 61,440 | 42,873 | 366 | 343 | 371 | 118 | 61 | 134 |
| Latin America | Brazil | Branch of ING Bank N.V. | Wholesale | 89 | 88 | 78 | 43 | 35 | 47 | 2,921 | 1,974 | 1,184 | 27 | 16 | 16 | 6 | 9 | 4 |
| | Colombia | ING Capital Colombia S.A.S. | Wholesale | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | | | | | | |
| | Mexico | ING Consulting, S.A. de C.V. | Wholesale | 8 | 8 | 8 | 1 | 1 | 1 | 2 | 2 | 2 | –2 | –2 | –2 | | | |
| Asia | China | Branch of ING Bank N.V. | Wholesale | 89 | 86 | 81 | 35 | 37 | 35 | 2,031 | 2,107 | 2,298 | 7 | 3 | 7 | –1 | 7 | –2 |
| | Japan | Branch of ING Bank N.V. | Wholesale | 33 | 32 | 35 | 31 | 36 | 33 | 5,109 | 2,300 | 2,238 | 22 | 19 | 17 | 8 | 5 | 11 |
| | Singapore | Branch of ING Bank N.V. | Wholesale | 592 | 546 | 512 | 349 | 340 | 297 | 27,982 | 32,222 | 25,803 | 76 | 176 | 133 | 13 | 21 | 9 |
| | Macau | Payvision Macau Ltd. | Wholesale | | | n/a | | | n/a | | | n/a | | | n/a | | | n/a |
| | Hong Kong | Branch of ING Bank N.V. | Wholesale | 128 | 122 | 108 | 96 | 110 | 94 | 7,350 | 6,975 | 7,850 | 38 | 52 | 55 | 7 | 8 | 7 |
| | Philippines | Branch of ING Bank N.V. | Wholesale/ Retail | 1,420 | 878 | 604 | 25 | 17 | 18 | 412 | 395 | 322 | –11 | | 6 | –5 | 3 | 2 |
| | South Korea | Branch of ING Bank N.V. | Wholesale | 79 | 80 | 82 | 60 | 55 | 55 | 5,457 | 4,299 | 4,602 | 25 | 14 | 21 | 7 | 3 | 6 |
| | Taiwan | Branch of ING Bank N.V. | Wholesale | 34 | 33 | 33 | 26 | 23 | 23 | 2,873 | 2,839 | 3,910 | 10 | 7 | 11 | | | |
| | Indonesia | PT ING Securities Indonesia | Wholesale | | 3 | 5 | | | 1 | 6 | 6 | 6 | | | | | | |
| | Malaysia | Branch of ING Bank N.V. | Wholesale | 5 | 5 | 5 | 1 | 1 | | 166 | 139 | 29 | | | –1 | | | |
| | India | Branch of ING Bank N.V. | Wholesale | | | | | | 1 | | 1 | 2 | | | 1 | | | |
| | Turkey | ING Bank A.S. | Wholesale / Retail | 4,074 | 4,709 | 5,221 | 677 | 678 | 741 | 9,927 | 11,521 | 13,798 | 304 | 245 | 267 | 66 | 50 | 54 |
| | United Arabic Emirates | Branch of ING Bank N.V. | Wholesale | 11 | 11 | 10 | –1 | | | | | | –2 | –1 | –2 | | | |
| Australia | Australia | ING Bank (Australia) Ltd. | Wholesale / Retail | 1,319 | 1,234 | 1,143 | 701 | 647 | 577 | 43,482 | 39,673 | 37,982 | 400 | 389 | 330 | 121 | 118 | 235 |
| Other | Mauritius | ING Mauritius Ltd. | Investment Management | | | | 0 | 1 | 1 | 1 | 920 | 939 | –0 | 1 | | | | |
| Total | | | | **53,431** | **52,233** | **51,504** | **18,306** | **18,176** | **17,773** | **891,744** | **887,030** | **846,216** | **6,834** | **6,838** | **7,268** | **1,955** | **2,027** | **2,281** |

1 Public subsidies received, as defined in article 89 of the CRD IV, amounts to EUR 0.3 million (2018: EUR 0.5 million; 2017: EUR 0.5 million).

**2019**
The relatively high tax charge of 30% in the Netherlands (compared to statutory rate of 25%) is mainly caused by the non-deductible Dutch bank tax (EUR 177 million) and the non-deductible AT1 interest expenses (EUR 276 million).

The relatively low tax charge in Switzerland is caused by a deferred tax benefit following a tax rate reduction in 2019.

**2018**
The relatively high tax charge of 36% in the Netherlands (compared to statutory rate of 25%) is mainly caused by non-deductible expenses of EUR 775 million upon the settlement agreement reached with the Dutch authorities on regulatory issues.

**2017**
Australia has a very high tax charge due to a tax charge at ING Australia Holdings Ltd related to the years 2007-2013, for which a full reimbursement is expected to be received from NN Group. Although the impact on net result was nil, this special item affected both the tax and 'other income' line in the Consolidated statement of profit or loss.
Due to the tax reforms in the US and Belgium, which resulted in a tax charge to record a reduction in deferred tax assets, the tax charge is significantly higher.
Austria, China, Singapore and Taiwan all have lower tax charges due to prior year adjustments.

# Additional notes to the Consolidated financial statements

## 36 Pension and other post-employment benefits

Most group companies sponsor defined contribution pension plans. The assets of all ING Group's defined contribution plans are held in independently administered funds. Contributions are generally determined as a percentage of remuneration. For the defined contribution scheme in the Netherlands, the premium paid is also dependent on the interest rate developments and the methodology of the Dutch Central Bank for determining the ultimate forward rate. These plans do not give rise to provisions in the statement of financial position, other than relating to short-term timing differences included in other assets/liabilities.

ING Group maintains defined benefit retirement plans in some countries. These plans provide benefits that are related to the remuneration and service of employees upon retirement. The benefits in some of these plans are subject to various forms of indexation. The indexation is, in some cases, at the discretion of management; in other cases it is dependent upon the sufficiency of plan assets.

Annual contributions are paid to the funds at a rate necessary to adequately finance the accrued liabilities of the plans calculated in accordance with local legal requirements. Plans in all countries are designed to comply with applicable local regulations governing investments and funding levels.

ING Group provides other post-employment benefits to certain employees and former employees. These are primarily post-employment healthcare benefits and discounts on ING products provided to employees and former employees.

## Statement of financial position - Net defined benefit asset/liability

### Plan assets and defined benefit obligation per country

| | Plan assets | | Defined benefit obligation | | Funded Status | |
|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| The Netherlands | 454 | 394 | 634 | 540 | –180 | –146 |
| United States | 277 | 222 | 275 | 224 | 3 | –3 |
| United Kingdom | 1,887 | 1,703 | 1,184 | 1,179 | 703 | 524 |
| Belgium | 590 | 547 | 676 | 636 | –85 | –88 |
| Other countries | 168 | 154 | 383 | 334 | –214 | –181 |
| **Funded status (Net defined benefit asset/liability)** | **3,377** | **3,019** | **3,151** | **2,913** | **226** | **106** |
| | | | | | | |
| Presented as: | | | | | | |
| – Other assets | | | | | 709 | 527 |
| – Other liabilities | | | | | –483 | –421 |
| | | | | | **226** | **106** |

The most recent (actuarial) valuations of the plan assets and the present value of the defined benefit obligation were carried out as at 31 December 2019. The present value of the defined benefit obligation, and the related current service cost and past service cost, were determined using the projected unit credit method.

Changes in the fair value of plan assets for the period were as follows:

### Changes in fair value of plan assets

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 3,019 | 3,206 |
| Interest income | 70 | 66 |
| Remeasurements: Return on plan assets excluding amounts included in interest income | 274 | –143 |
| Employer's contribution | 34 | 66 |
| Participants contributions | 2 | 3 |
| Benefits paid | –126 | –176 |
| Exchange rate differences | 104 | –3 |
| **Closing balance** | **3,377** | **3,019** |
| | | |
| Actual return on the plan assets | **344** | **–77** |

As at 31 December 2019 the various defined benefit plans did not hold any direct investments in ING Groep N.V. (2018: nil). During 2019 and 2018 there were no purchases or sales of assets between ING and the pension funds.

ING does not manage the pension funds and thus receives no compensation for fund management. The pension fund has not engaged ING in any swap or derivative transactions to manage the risk of the pension funds.

No plan assets are expected to be returned to ING Group during 2020.

Changes in the present value of the defined benefit obligation and other post-employment benefits for the period were as follows:

## Changes in defined benefit obligation and other post-employment benefits

| | Defined benefit obligation | | Other post-employment benefits | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 2,913 | 3,140 | 76 | 87 |
| Current service cost | 28 | 39 | –1 | –4 |
| Interest cost | 65 | 61 | 3 | 2 |
| Remeasurements: Actuarial gains and losses arising from changes in demographic assumptions | –6 | 2 | | |
| Remeasurements: Actuarial gains and losses arising from changes in financial assumptions | 206 | –153 | 7 | –11 |
| Participants' contributions | 2 | 3 | 1 | 1 |
| Benefits paid | –130 | –179 | –1 | –1 |
| Past service cost | –0 | 0 | | |
| Exchange rate differences | 73 | 2 | 1 | 2 |
| Changes in the composition of the group and other changes | 0 | –1 | | |
| **Closing balance** | **3,151** | **2,913** | **84** | **76** |

Amounts recognised directly in Other comprehensive income (equity) were as follows:

## Changes in the net defined benefit assets/liability remeasurement reserve

| | 2019 | 2018 |
|---|---|---|
| Opening balance | –394 | –400 |
| | | |
| Remeasurement of plan assets | 274 | –143 |
| Actuarial gains and losses arising from changes in demographic assumptions | 6 | –2 |
| Actuarial gains and losses arising from changes in financial assumptions | –206 | 153 |
| Taxation and Exchange rate differences | –15 | –3 |
| **Total Other comprehensive income movement for the year** | **58** | **6** |
| | | |
| **Closing balance** | **–336** | **–394** |

In 2019 EUR 274 million remeasurement of plan assets recognized as a gain in Other comprehensive income is driven by higher yields on investments. The EUR -206 million actuarial gains and losses arising from changes in financial assumptions in the calculation of the defined benefit obligation are mainly due to a decrease in discount rates.

The accumulated amount of remeasurements recognised directly in Other comprehensive income (equity) is EUR -378 million (EUR -336 million after tax) as at 31 December 2019 (2018: EUR -453 million, EUR -394 million after tax).

Amounts recognised in the statement of profit or loss related to pension and other staff related benefits are as follows:

## Pension and other staff-related benefit costs

| | Net defined benefit asset/liability | | | Other post-employment benefits | | | Other | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Current service cost | 28 | 39 | 34 | –1 | –4 | –3 | 1 | 22 | –2 | 29 | 57 | 29 |
| Past service cost | – | 0 | | | | | | | | – | 0 | |
| Net Interest cost | –5 | –4 | –4 | 3 | 2 | 3 | | 0 | 1 | –2 | –2 | |
| Effect of curtailment or settlement | | | –3 | | | | | –1 | | | –1 | –3 |
| **Defined benefit plans** | **23** | **35** | **27** | **2** | **–1** | | **2** | **21** | **–1** | **26** | **54** | **26** |
| | | | | | | | | | | | | |
| Defined contribution plans | | | | | | | | | | 340 | 331 | 355 |
| | | | | | | | | | | **366** | **385** | **381** |

### Determination of the net defined benefit asset/liability
The net defined benefit asset/liability is reviewed and adjusted annually. The assumptions used in the determination of the net defined benefit asset/liability and the Other post-employment benefits include discount rates, mortality rates, expected rates of salary increases (excluding promotion increases), and indexation. The rates used for salary developments, interest discount factors, and other adjustments reflect country-specific conditions.

The key assumption in the determination of the net defined benefit asset/liability is the discount rate. The discount rate is the weighted average of the discount rates that are applied in different regions where ING Group has defined benefit pension plans (weighted by the defined benefit obligation). The discount rate is based on a methodology that uses market yields on high quality corporate bonds of the specific regions with durations matching the pension liabilities as key input. Market yields of high quality corporate bonds reflect the yield on corporate bonds with an AA rating for durations where such yields are available. An extrapolation is applied in order to determine the yield to the longer durations for which no AA-rated corporate bonds are available. As a result of the limited availability of long-duration AA-rated corporate bonds, extrapolation is an important element of the determination of the discount rate. The weighted average discount rate applied for net defined benefit asset/liability for 2019 was 1.5% (2018: 2.3%) based on the pension plan in the Netherlands, Germany, Belgium, The United States of America, and the United Kingdom. The average discount rate applied for Other post-employment benefits was 3.3% (2018: 3.9%).

### Sensitivity analysis of key assumptions
ING performs sensitivity analysis on the most significant assumptions: discount rates, mortality, expected rate of salary increase, and indexation. The sensitivity analysis has been carried out under the assumption that the changes occurred at the end of the reporting period.

The sensitivity analysis calculates the financial impact on the defined benefit obligation of an increase or decrease of the weighted averages of each significant actuarial assumption, all other assumptions held constant. In practice, this is unlikely to occur, and some changes of the assumptions may be correlated. Changes to mortality, expected rate of salary increase, and indexation would have no material impact on the defined benefit obligation. The most significant impact would be from a change in the discount rate. An increase or decrease in the discount rate of 1% creates an impact on the defined benefit obligation of EUR -443 million and EUR 561 million, respectively.

### Expected cash flows
Annual contributions are paid to the funds at a rate necessary to adequately finance the accrued liabilities of the plans calculated in accordance with local legal requirements. Plans in all countries are designed to comply with applicable local regulations governing investments and funding levels. ING Group's subsidiaries should fund the cost of the entitlements expected to be earned on a yearly basis.

For 2020 the expected contributions to defined benefit pension plans are EUR 44 million.

The benefit payments for defined benefit and other post-employment benefits expected to be made by the plan between 2020-2024 are estimated to be between EUR 100 million and EUR 135 million per annum. From 2025 to 2029 the total payments made by the plan are expected to be EUR 882 million.

# 37 Taxation

**Statement of financial position – Deferred tax**

Deferred taxes are recognised on all temporary differences under the liability method using tax rates applicable in the jurisdictions in which ING Group is subject to taxation.

## Changes in deferred tax

| 2019 | Net liability (-) Net asset (+) 2018 | Change through equity | Change through net result | Exchange rate differences | Changes in the compo-sition of the group and other changes | Net liability (-) Net asset (+) 2019 |
|---|---|---|---|---|---|---|
| Financial assets at FVOCI[1] | –106 | 18 | –11 | –1 | | –99 |
| Investment properties | –6 | | –1 | | | –7 |
| Financial assets and liabilities at FVPL[1] | 43 | | 11 | 2 | –2 | 54 |
| Depreciation | –23 | | 5 | | | –19 |
| Cash flow hedges | –140 | –199 | | 2 | | –337 |
| Pension and post-employment benefits | 59 | –14 | 2 | –5 | | 42 |
| Other provisions | 10 | | –1 | –3 | | 6 |
| Loans and advances[1] | 474 | –1 | 18 | | | 490 |
| Unused tax losses carried forward | 51 | | 5 | 5 | | 61 |
| Other | –160 | 16 | –13 | 1 | | –156 |
| | **201** | **–181** | **15** | **2** | **–2** | **36** |
| Presented in the statement of financial position as: | | | | | | |
| – Deferred tax liabilities | –640 | | | | | –695 |
| – Deferred tax assets | 841 | | | | | 730 |
| | **201** | | | | | **36** |

1 The prior period has been updated to improve consistency and comparability.

IFRS 16 Leases (implemented per 1 January 2019) requires lessees to recognise right-of-use assets and lease liabilities on the balance sheet. The above table shows netted amounts which include in the row 'Other' a deferred tax amount for right-of-use assets of EUR 370 million (1 January 2019: EUR 320 million) and a deferred tax amount for lease liabilities of EUR -376 million (1 January 2019: EUR -323 million).

## Changes in deferred tax

| 2018 | Net liability (-) Net asset (+) 2017 | Effect of changes in accounting policies due to the implementa tion of IFRS 9 | Change through equity | Change through net result | Exchange rate differences | Changes in the compo-sition of the group and other changes | Net liability (-) Net asset (+) 2018 |
|---|---|---|---|---|---|---|---|
| Financial assets at FVOCI[1] | –630 | 142 | 109 | 273 | 4 | –2 | –106 |
| Investment properties | –5 | | | –1 | 0 | | –6 |
| Financial assets and liabilities at FVPL[1] | 375 | 16 | | –368 | 17 | 1 | 43 |
| Depreciation | –24 | | | 1 | –0 | | –23 |
| Cash flow hedges | –72 | | –76 | | 7 | 1 | –140 |
| Pension and post-employment benefits | 76 | | –12 | –8 | 2 | 0 | 59 |
| Other provisions | 198 | 4 | | –187 | –7 | 1 | 10 |
| Loans and advances[1] | 338 | 137 | 2 | –5 | –0 | 2 | 474 |
| Unused tax losses carried forward | –8 | | | 61 | –2 | –0 | 51 |
| Other | –183 | 45 | –53 | 60 | 1 | –31 | –160 |
| | **66** | **344** | **–29** | **–175** | **23** | **–27** | **201** |
| Presented in the statement of financial position as: | | | | | | | |
| – Deferred tax liabilities | –752 | | | | | | –640 |
| – Deferred tax assets | 818 | | | | | | 841 |
| | **66** | | | | | | **201** |

1 The prior period has been updated to improve consistency and comparability.

The deferred tax balance recorded under 'Other provisions' declined in 2018 by EUR 187 million change through net result of which EUR 90 million relates to the decline of the Belgian reorganisation provision.

Changes in the Composition of the Group and other changes include the deferred tax liability (EUR -30 million) regarding the acquisition of Payvision.

### Deferred tax in connection with unused tax losses carried forward

| | 2019 | 2018 |
|---|---|---|
| Total unused tax losses carried forward | 1,685 | 1,773 |
| Unused tax losses carried forward not recognised as a deferred tax asset | 922 | 1,010 |
| Unused tax losses carried forward recognised as a deferred tax asset | **764** | **763** |
| | | |
| Average tax rate | 21.4% | 20.4% |
| Deferred tax asset | 163 | 156 |

### Total unused tax losses carried forward analysed by expiry terms

| | No deferred tax asset recognised | | Deferred tax asset recognised | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Within 1 year | 1 | 1 | | 0 |
| More than 1 year but less than 5 years | 4 | 2 | 17 | 2 |
| More than 5 years but less than 10 years | 92 | 83 | 0 | 1 |
| Unlimited | 824 | 923 | 746 | 759 |
| | **922** | **1,010** | **764** | **763** |

The above mentioned deferred tax of EUR 163 million (2018: EUR 156 million) and the related unused tax losses carried forward exclude the deferred tax liability recorded in the Netherlands with respect to the recapture of previously deducted UK tax losses in the Netherlands for the amount of EUR -102 million (2018: EUR -105 million).

Deferred tax assets are recognised for temporary deductible differences, for tax losses carried forward and unused tax credits only to the extent that realisation of the related tax benefit is probable.

### Breakdown of certain net deferred tax asset positions by jurisdiction

| | 2019 | 2018 |
|---|---|---|
| Italy | 181 | 189 |
| Philippines | 7 | |
| Slovakia | 1 | |
| | **189** | **189** |

The table above include a breakdown of certain net deferred tax asset positions by jurisdiction for which the utilisation of the deferred tax asset is dependent on future taxable profits in excess of the profits arising from the reversal of existing taxable temporary differences whilst the related entities have incurred losses in either the current or the preceding year.

Recognition is based on the fact that it is probable that the entity will have taxable profits and/or can utilise tax planning opportunities before expiration of the deferred tax assets. Changes in circumstances in future periods may adversely impact the assessment of the recoverability. The uncertainty of the recoverability is taken into account in establishing the deferred tax assets.

As at 31 December 2019 and 31 December 2018, ING Groep N.V. had no significant temporary differences associated with the parent company's investments in subsidiaries as any economic benefit from those investments will not be taxable at parent company level.

## Statement of profit or loss – Taxation

### Taxation by type

| | Netherlands | | | International | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
| Current taxation | 488 | 587 | 488 | 1,481 | 1,264 | 1,527 | 1,970 | 1,851 | 2,015 |
| Deferred taxation | 42 | 37 | 151 | –57 | 138 | 115 | –15 | 175 | 266 |
| | **530** | **624** | **639** | **1,425** | **1,402** | **1,642** | **1,955** | **2,027** | **2,281** |

### Reconciliation of the weighted average statutory income tax rate to ING Group's effective income tax rate

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Result before tax from continuing operations | 6,834 | 6,838 | 7,268 |
| Weighted average statutory tax rate | 25.9% | 25.9% | 27.1% |
| Weighted average statutory tax amount | **1,769** | **1,772** | **1,968** |
| | | | |
| Participation exemption | –49 | –77 | –45 |
| Other income not subject to tax | –76 | –70 | –74 |
| Expenses not deductible for tax purposes | 237 | 346 | 156 |
| Impact on deferred tax from change in tax rates | –64 | –8 | 55 |
| Deferred tax benefit from previously unrecognised amounts | | | –4 |
| Current tax from previously unrecognised amounts | 48 | 28 | 66 |
| Write-off/reversal of deferred tax assets | 2 | 4 | 2 |
| State and local taxes | 72 | 25 | 47 |
| Adjustment to prior periods | 16 | 7 | 110 |
| Effective tax amount | **1,955** | **2,027** | **2,281** |
| | | | |
| Effective tax rate | **28.6%** | **29.6%** | **31.4%** |

The weighted average statutory tax rate in 2019 is equal to the rate of 25.9% in 2018. The weighted average statutory tax rate in 2018 is lower compared to 2017, due to a decrease in statutory income tax rates in the USA and Belgium in that year.

The effective tax rate of 28.6% in 2019 is higher than the weighted average statutory tax rate. This is mainly caused by a high amount of expenses non-deductible for tax purposes with respect to interest on additional Tier 1 securities and non-deductible bank tax in the Netherlands and regulatory expenses non-deductible for tax purposes in some other European countries.

The effective tax rate of 29.6% in 2018 is significantly higher than the weighted average statutory tax rate. This is mainly caused by a high amount of expenses non-deductible for tax purposes (tax amount: EUR 346 million).

This relatively high amount of non-deductible expenses is caused by the EUR 775 million settlement agreement reached with the Dutch Public Prosecution Service (tax amount: EUR 194 million).

The effective tax rate in 2017 was with 31.4% significantly higher than the weighted average statutory tax rate. This was caused by the following items:

- A relatively high amount of prior period tax adjustments which ING, for the most part is reimbursed by NN Group (reimbursement is included in the result before tax), recognised under 'Adjustment to prior periods';
- Impact on deferred tax positions following changes in the income tax rate in the USA and Belgium, recognised under 'Impact on deferred tax from change in tax rates'; and
- The recapture of previously deducted UK tax losses in the Netherlands due to increased profitability in the United Kingdom, recognised under 'Current tax from previously unrecognised amounts'.

### Equity – Other comprehensive income

**Income tax related to components of other comprehensive income**

| | 2019 | 2018[1] | 2017 |
|---|---|---|---|
| Unrealised revaluations financial assets at fair value through other comprehensive income and other revaluations | 6 | 86 | 103 |
| Realised gains/losses transferred to the statement of profit or loss (reclassifications from equity to profit or loss) | 12 | 23 | 20 |
| Changes in cash flow hedge reserve | –199 | –76 | 167 |
| Remeasurement of the net defined benefit asset/liability | –14 | –12 | –25 |
| Changes in fair value of own credit risk of financial liabilities at fair value through profit or loss | 7 | –33 | |
| Exchange rate differences and other | 7 | –18 | –12 |
| Total income tax related to components of other comprehensive income | **–181** | **–29** | **253** |

1 The prior period has been updated to improve consistency and comparability.

### Tax Contingency

The contingent liability (also disclosed in note 45 'Contingent liabilities') in connection with taxation in the Netherlands refers to a possible obligation arising from the deduction from Dutch taxable profit of losses incurred by ING Bank in the United Kingdom in previous years. The existence of this obligation will be confirmed only by the occurrence of future profits in the United Kingdom.

## 38 Fair value of assets and liabilities

### a) Financial assets and liabilities

The following table presents the estimated fair values of ING Group's financial assets and liabilities. Certain items per the statement of financial position are not included in the table, as they do not meet the definition of a financial asset or liability. The aggregation of the fair values presented below does not represent, and should not be construed as representing, the underlying value of ING Group.

**Fair value of financial assets and liabilities**

| | Estimated fair value | | Statement of financial position value | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| **Financial assets** | | | | |
| Cash and balances with central banks | 53,202 | 49,987 | 53,202 | 49,987 |
| Loans and advances to banks | 35,133 | 30,549 | 35,136 | 30,422 |
| Financial assets at fair value through profit or loss | | | | |
| – Trading assets | 49,254 | 50,152 | 49,254 | 50,152 |
| – Non-trading derivatives | 2,257 | 2,664 | 2,257 | 2,664 |
| – Assets mandatorily as at fair value through profit or loss | 41,600 | 64,783 | 41,600 | 64,783 |
| – Assets designated as at fair value through profit or loss | 3,076 | 2,887 | 3,076 | 2,887 |
| Financial assets at fair value through other comprehensive income | | | | |
| – Equity securities | 2,306 | 3,228 | 2,306 | 3,228 |
| – Debt securities | 30,483 | 25,616 | 30,483 | 25,616 |
| – Loans and advances | 1,680 | 2,379 | 1,680 | 2,379 |
| Securities at amortised cost | 46,928 | 47,815 | 46,108 | 47,276 |
| Loans and advances to customers | 621,194 | 602,841 | 611,765 | 592,196 |
| Other assets[1] | 5,854 | 7,397 | 5,854 | 7,397 |
| | **892,966** | **890,299** | **882,721** | **878,987** |
| **Financial liabilities** | | | | |
| Deposits from banks | 35,086 | 37,631 | 34,826 | 37,330 |
| Customer deposits | 575,055 | 556,127 | 574,433 | 555,812 |
| Financial liabilities at fair value through profit or loss | | | | |
| – Trading liabilities | 28,042 | 31,215 | 28,042 | 31,215 |
| – Non-trading derivatives | 2,215 | 2,299 | 2,215 | 2,299 |
| – Designated as at fair value through profit or loss | 47,684 | 59,179 | 47,684 | 59,179 |
| Other liabilities[2] | 9,776 | 12,117 | 9,776 | 12,117 |
| Debt securities in issue | 118,844 | 119,893 | 118,528 | 119,751 |
| Subordinated loans | 17,253 | 13,519 | 16,588 | 13,724 |
| | **833,956** | **831,980** | **832,092** | **831,429** |

1 Other assets do not include, among others: (deferred) tax assets, net defined benefit asset, inventory, property development and property obtained from foreclosures.
2 Other liabilities do not include, among others: (deferred) tax liabilities, net defined benefit and related employee benefit liabilities, reorganisation and other provisions, other taxation, social security contributions and lease liabilities.

## Valuation Methods

The estimated fair values represent the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is a market-based measurement, which is based on assumptions that market participants would use and takes into account the characteristics of the asset or liability that market participants would take into account when pricing the asset or liability. Fair values of financial assets and liabilities are based on quoted prices in active market where available. When such quoted prices are not available, the fair value is determined by using valuation techniques.

ING uses unadjusted quotes where available. Unadjusted quoted prices are primarily obtained from exchange prices for listed financial instruments. Where an exchange price is not available, quoted market prices in active markets may be obtained from independent market vendors, brokers, or market makers. In general, positions are valued at the bid price for a long position and at the offer price for a short position or are valued at the price within the bid-offer spread that is most representative of fair value at the date of valuation.

For certain financial assets and liabilities quoted market prices are not available. For these financial assets and liabilities, fair value is determined using valuation techniques. These valuation techniques range from discounting of cash flows to various valuation models, where relevant pricing factors including the market price of underlying reference instruments, market parameters (e.g. volatilities, correlations and credit ratings), and customer behaviour are taken into account. ING maximises the use of market observable inputs and minimises the use of unobservable input in determining the fair value. The fair value can be subjective dependent on the significance of the unobservable input to the overall valuation. All valuation techniques used are subject to internal review and approval. Data used in these valuation techniques are validated on a daily basis when possible.

When a group of financial assets and financial liabilities are managed on the basis of their net risk exposures, are measured the fair value of a group of financial assets or liabilities on net portfolio level.

## Control framework

To determine whether the valuations based upon data inputs have led to an appropriate fair value, the process of independent price verification ('IPV') or price testing is applied. This is done to ensure the appropriate reflection of these valuations in balance sheet and the profit and loss accounts. IPV tests and confirms the reliability of the market data used in these valuations and can lead to adjustments in valuation. The IPV process is performed at least monthly or more frequently depending on the nature of the market or trading activity. Multiple data sources are used to the extent that such prices are available and taking into account cost-benefit ratio of retrieving such prices. Valuation differences between primary and secondary source data are assessed. When differences resulting from price testing exceed pre-approved thresholds, adjustments to the profit and loss shall be made. Differences and adjustments must be assessed individually, approved by the Local Parameter Committee, and reported back in the meeting minutes. In case a material difference in value is found through the IPV process, it must be fully understood what the underlying cause is for the difference, and if a systematic change is required (e.g. change of source). Pricing and price testing is applied at individual trade level and is organised at a desk level. Valuation processes are governed by various governance bodies, which include Local Parameter Committees (LPC), Global Price Testing and Impairment Committee (GP&IC), Market Data Committee (MDC), Trading Pricing Model Committee (TPMC). All relevant committees meet on a quarterly basis or more frequent as required. Key valuation controls including product approval process (PARP), IPV, valuation adjustments, and model use is monitored.

The Global Price Testing and Impairment Committee is responsible for the oversight and the approval of the outcome of impairments (other loan loss provisions) and valuation- (price-testing) processes. It oversees the quality and coherence of valuation methodologies and processes. The TMPC is responsible for validating the appropriate models. Local Parameter Committees monitor the appropriateness of (quoted) pricing, any other relevant market info, as well as that of pricing models themselves related to the fair valued positions to which they are applied. LPC executes valuation methodology and processes at a local level. The Market Data Committee approves and reviews all pricing inputs for the calculation of market parameters.

### Valuation Adjustments

Valuation adjustments are an integral part of the fair value. They are included as part of the fair value to provide better estimation of market exit value on measurement date. ING considers various valuation adjustments to arrive at the fair value including Bid-Offer adjustments, Credit Valuation Adjustments (CVA), Debt Valuation Adjustments (DVA), Model Risk Adjustments, Collateral Valuation Adjustment (CollVA), Funding Valuation Adjustment (FVA) and Exceptional Valuation Adjustments. The combination of Credit Valuation adjustment and Debt Valuation adjustment for derivatives is called Bilateral Valuation Adjustment (BVA).

- Bid-Offer adjustments are required to adjust mid-market values to appropriate bid or offer value in order to best represent the exit value, and therefore fair value. It is applicable to financial assets and liabilities that are valued at mid-price initially. In practice this adjustment accounts for the difference in valuation from mid to bid and mid to offer for long and short exposures respectively. In principle assets are valued at the bid prices and liabilities are valued at the offer price. For certain assets or liabilities, where market quoted price is not available, the price within the bid-offer spread that is most representative of fair value is used.
- Bilateral Valuation Adjustment (BVA) is the valuation component for the counterparty credit risk of the derivative contracts. It has bilateral nature, where both counterparty's credit risk and ING's own credit risks is taken into account. The calculation is based on the estimation of the expected exposure, the counterparties' risk of default, and taking into account the collateral agreements as well as netting agreements. The counterparties' risk of default is measured by probability of default and expected loss given default, which is based on market information including credit default swap (CDS) spread. Where counterparty CDS spreads are not available, relevant proxy spreads are used. Additionally, wrong-way risk (when exposure to a counterparty is increasing and the credit quality of that counterparty deteriorates) and right-way risk (when exposure to a counterparty is increasing and the credit quality of that counterparty improves) are included in the adjustment.
- ING applies Debt Valuation Adjustment (DVA) to own issued financial liabilities that are measured at fair value through profit or loss, if the credit risk component has not been included in the prices. In the DVA calculation, the default probability of the institution are estimated based on the ING Funding spread.
- Model risk adjustments reduce the risk of possible financial losses resulting from the use of a mis-specified, misapplied, or incorrect implementation of a model.
- Collateral Valuation Adjustment (CollVA) is a derivative valuation adjustment capturing specific features of CSA (Credit Support Annex) with a counterparty that the regular valuation framework does not capture. Non-standard CSA features may include deviations in relation to the currency in which ING posts or receives collateral, deviations in remuneration rate on collateral which may pay lower or higher rate than overnight rate or even no interest at all. Other deviations can be posting securities rather than cash as collateral.
- ING applies an additional 'Funding Valuation Adjustment' (FVA) to address the funding costs associated with the collateral funding asymmetry on uncollateralized or partially collateralized derivatives in the portfolio. This adjustment is based on the expected exposure profiles of the uncollateralized or partially collateralized OTC derivatives and market-based funding spreads.
- Exceptional Valuation Adjustments – Exceptional valuation adjustments are valuation adjustments of temporary nature and are subject to approval of GP&IC.

The following methods and assumptions were used by ING Group to estimate the fair value of the financial instruments:

## a.1) Financial assets

### Cash and balances with central banks

The carrying amount of cash approximates its fair value.

### Loans and advances to banks

The fair values of receivables from banks are generally based on quoted market prices or, if unquoted, on estimates based on discounting future cash flows using available market interest rates including appropriate spreads offered for receivables with similar characteristics, similar to Loans and advances to customers described below.

## Financial assets at fair value through profit or loss, Financial assets at fair value through other comprehensive income and Securities at amortised cost

### Derivatives

Derivatives contracts can either be exchange-traded or over the counter (OTC). The fair value of exchange-traded derivatives is determined using quoted market prices in an active market and those derivatives are classified in Level 1 of the fair value hierarchy. For those instruments not actively traded, fair values are estimated based on valuation techniques. OTC derivatives and derivatives trading in an inactive market are valued using valuation techniques because quoted market prices in an active market are not available for such instruments. The valuation techniques and inputs depend on the type of derivative and the nature of the underlying instruments. The principal techniques used to value these instruments are based on (amongst others) discounted cash flows option pricing models and Monte Carlo simulation. These valuation models calculate the present value of expected future cash flows, based on 'no-arbitrage' principles. These models are commonly used in the financial industry. Inputs to valuation models are determined from observable market data where possible. Certain inputs may not be observable in the market, but can be determined from observable prices via valuation model calibration procedures. The inputs used include for example prices available from exchanges, dealers, brokers or providers of pricing, yield curves, credit spreads, default rates, recovery rates, dividend rates, volatility of underlying interest rates, equity prices, and foreign currency exchange rates. These inputs are determined with reference to quoted prices, recently executed trades, independent market quotes and consensus data, where available.

For uncollateralised OTC derivatives, ING applies Credit Valuation Adjustment to correctly reflect the counterparty credit risk in the valuation. See section CVA/DVA/BVA for more details regarding the calculation.

### Equity securities

The fair values of publicly traded equity securities are based on quoted market prices when available. Where no quoted market prices are available, fair value is determined based on quoted prices for similar securities or other valuation techniques.

The fair value of private equity is based on quoted market prices, if available. In the absence of quoted prices in an active market, fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects, price, earnings comparisons and revenue multiples, and by reference to market valuations for similar entities quoted in an active market.

### Debt securities

Fair values for debt securities are based on quoted market prices, where available. Quoted market prices may be obtained from an exchange, dealer, broker, industry group, pricing service, or regulatory service. The quoted prices from non-exchange sources are assessed to determine if they are tradable prices. This distinction determines where it falls in the fair value hierarchy.

If quoted prices in an active market are not available, fair value is based on an analysis of available market inputs, which may include consensus prices obtained from one or more pricing services or by a valuation technique that discounts expected future cash flows using a market interest rate curves, referenced credit spreads, maturity of the investment, and estimated prepayment rates where applicable.

## Loans and advances to customers

For loans and advances that are repriced frequently and have had no significant changes in credit risk, carrying amounts represent a reasonable estimate of the fair value. The fair value of other loans is estimated by discounting expected future cash flows using a discount rate that reflects credit risk, liquidity, and other current market conditions. The fair value of mortgage loans is estimated by taking into account prepayment behaviour. Loans with similar characteristics are aggregated for calculation purposes.

### Other assets

The other assets are stated at their carrying value which is not significantly different from their fair value.

## a.2) Financial liabilities

### Deposits from banks

The fair values of payables to banks are generally based on quoted market prices or, if not available, on estimates based on discounting future cash flows using available market interest rates and credit spreads for payables to banks with similar characteristics.

### Customer deposits

The carrying values of customer deposits with an immediate on demand features approximate their fair values. The fair values of deposits with fixed contractual terms have been estimated based on discounting future cash flows using the interest rates currently applicable to deposits of similar maturities.

### Financial liabilities at fair value through profit or loss

The fair values of securities in the trading portfolio and other liabilities at fair value through profit or loss are based on quoted market prices, where available. For those securities not actively traded, fair values are estimated based on internal discounted cash flow valuation techniques using interest rates and credit spreads that apply to similar instruments. Reference is made to Financial assets at fair value through profit or loss above.

### Other liabilities

The other liabilities are stated at their carrying value which is not significantly different from their fair value.

### Debt securities in issue

The fair value of debt securities in issue is generally based on quoted market prices, or if not available, on estimated prices by discounting expected future cash flows using a current market interest rate and credit spreads applicable to the yield, credit quality and maturity.

### Subordinated loans

The fair value of publicly traded subordinated loans are based on quoted market prices when available. Where no quoted market prices are available, fair value of the subordinated loans is estimated using discounted cash flows based on interest rates and credit spreads that apply to similar instruments.

## a.3) Fair value hierarchy

ING Group has categorised its financial instruments that are either measured in the statement of financial position at fair value or of which the fair value is disclosed, into a three level hierarchy based on the priority of the inputs to the valuation. The fair value hierarchy gives the highest priority to (unadjusted) quoted prices in active markets for identical assets or liabilities and the lowest priority to valuation techniques supported by unobservable inputs. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide reliable pricing information on an ongoing basis. The fair value hierarchy consists of three levels, depending upon whether fair values were determined based on (unadjusted) quoted prices in an active market (Level 1), valuation techniques with observable inputs (Level 2) or valuation techniques that incorporate inputs which are unobservable and which have a more than insignificant impact on the fair value of the instrument (Level 3). Financial assets in Level 3 include for example illiquid debt securities, complex derivatives, certain complex loans (for which current market information about similar assets to use as observable, corroborated data for all significant inputs into a valuation model is not available), and asset backed securities for which there is no active market and a wide dispersion in quoted prices.

Observable inputs reflect market data obtained from independent sources. Unobservable inputs are inputs which are based on the Group's own assumptions about the factors that market participants would use in pricing an asset or liability, developed based on the best information available in the market. Unobservable inputs may include volatility, correlation, spreads to discount rates, default rates and recovery rates, prepayment rates, and certain credit spreads. Transfers into and transfers out of fair value hierarchy levels are made on a quarterly basis.

### Level 1 – (Unadjusted) quoted prices in active markets

This category includes financial instruments whose fair value is determined directly by reference to (unadjusted) quoted prices in an active market that ING Group can access. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer markets, brokered markets, or principal to principal markets. Those prices represent actual and regularly occurring market transactions with sufficient frequency and volume to provide pricing information on an ongoing basis. Transfers out of Level 1 into Level 2 or Level 3 occur when ING Group establishes that markets are no longer active and therefore (unadjusted) quoted prices no longer provide reliable pricing information.

### Level 2 – Valuation technique supported by observable inputs

This category includes financial instruments whose fair value is based on market observables other than (unadjusted) quoted prices. The fair value for financial instruments in this category can be determined by reference to quoted prices for similar instruments in active markets, but for which the prices are modified based on other market observable external data or reference to quoted prices for identical or similar instruments in markets that are not active. These prices can be obtained from a third party pricing service. ING analyses how the prices are derived and determines whether the prices are liquid tradable prices or model based consensus prices taking various data as inputs.

For financial instruments that do not have a reference price available, fair value is determined using a valuation technique (e.g. a model), where inputs in the model are taken from an active market or are observable, such as interest rates and yield curves observable at commonly quoted intervals, implied volatilities, and credit spreads.

If certain inputs in the model are unobservable, the instrument is still classified in this category, provided that the impact of those unobservable inputs on the overall valuation is insignificant. The notion of significant is particularly relevant for the distinction between Level 2 and Level 3 assets and liabilities. ING Group has chosen to align the definition of significant with the 90% confidence range as captured in the prudent value definition by EBA. Unobservable parameters are shifted down and upwards to reach this 90% confidence range. The same 90% confidence range is applied to model uncertainty. If the combined change in asset value resulting from the shift of the unobservable parameters and the model uncertainty exceeds the threshold, the asset is classified as Level 3. A value change below the threshold results in a Level 2 classification.

Valuation techniques used for Level 2 assets and liabilities range from discounting of cash flows to various industry standard valuation models such as option pricing model and Monte Carlo simulation model, where relevant pricing factors including the market price of underlying reference instruments, market parameters (volatilities, correlations, and credit ratings), and customer behaviour are taken into account.

### Level 3 – Valuation technique supported by unobservable inputs

This category includes financial instruments whose fair value is determined using a valuation technique (e.g. a model) for which more than an insignificant part of the inputs in terms of the overall valuation are not market observable. This category also includes financial assets and liabilities whose fair value is determined by reference to price quotes but for which the market is considered inactive. An instrument in its entirety is classified as Level 3 if a significant portion of the instrument's fair value is driven by unobservable inputs. Unobservable in this context means that there is little or no current market data available from which to derive a price that an unrelated, informed buyer would purchase the asset or liability at.

## Financial instruments at fair value

The fair values of the financial instruments were determined as follows:

| Methods applied in determining fair values of financial assets and liabilities (carried at fair value) | Level 1 | | Level 2 | | Level 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| **Financial Assets** | | | | | | | | |
| Financial assets at fair value through profit or loss | | | | | | | | |
| - Trading assets | 13,228 | 13,041 | 35,852 | 36,617 | 174 | 494 | 49,254 | 50,152 |
| - Non-trading derivatives | | 0 | 2,249 | 2,636 | 8 | 27 | 2,257 | 2,664 |
| - Assets mandatorily at fair value through profit or loss | 22 | 141 | 40,196 | 63,601 | 1,381 | 1,042 | 41,600 | 64,783 |
| - Assets designated as at fair value through profit or loss | 203 | 147 | 1,628 | 1,665 | 1,244 | 1,075 | 3,076 | 2,887 |
| Financial assets at fair value through other comprehensive income | 32,165 | 27,218 | 343 | 1,256 | 1,961 | 2,749 | 34,468 | 31,223 |
| | **45,618** | **40,547** | **80,269** | **105,775** | **4,768** | **5,387** | **130,655** | **151,709** |
| | | | | | | | | |
| **Financial liabilities** | | | | | | | | |
| Financial liabilities at fair value through profit or loss | | | | | | | | |
| - Trading liabilities | 1,446 | 5,706 | 26,401 | 25,387 | 195 | 122 | 28,042 | 31,215 |
| - Non-trading derivatives | | 0 | 2,105 | 2,219 | 110 | 80 | 2,215 | 2,299 |
| - Financial liabilities designated as at fair value through profit or loss | 1,081 | 1,166 | 46,419 | 57,305 | 184 | 708 | 47,684 | 59,179 |
| | **2,527** | **6,872** | **74,924** | **84,911** | **490** | **910** | **77,942** | **92,693** |

In 2019, the decrease in financial assets mandatorily at fair value through profit or loss, mainly relates to reverse repurchase transactions for which the valuation technique is supported by observable inputs.

In 2019 there were no significant transfers between level 1 and 2 and no significant changes in valuation techniques.

## Changes in Level 3 Financial assets

| | Trading assets | | Non-trading derivatives | | Financial assets mandatorily at FVPL | | Financial assets designated at FVPL | | Financial assets at FVOCI | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 494 | 1,104 | 27 | 85 | 1,042 | | 1,075 | 365 | 2,749 | 480 | 5,387 | 2,034 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | | | | | 1,653 | | –1 | | 3,446 | | 5,097 |
| Realised gain/loss recognised in the statement of profit or loss during the period [1] | 40 | –54 | –21 | 109 | –63 | 10 | –6 | –20 | –15 | 1 | –66 | 45 |
| Revaluation recognised in other comprehensive income during the period [2] | | | | | | | | | 155 | –131 | 155 | –131 |
| Purchase of assets | 28 | 359 | | 2 | 1,494 | 1,154 | 360 | 731 | 11 | 85 | 1,893 | 2,331 |
| Sale of assets[3] | –53 | –120 | –3 | –166 | –832 | –1,677 | –212 | – | –680 | –557 | –1,780 | –2,521 |
| Maturity/settlement[3] | –11 | –42 | | | –461 | –78 | –35 | – | –212 | –330 | –719 | –450 |
| Reclassifications | –279 | | | | 279 | | | | 3 | 2 | 4 | 2 |
| Transfers into Level 3 | 26 | 85 | 4 | | 9 | | 63 | | | –0 | 103 | 85 |
| Transfers out of Level 3 | –72 | –839 | | | –88 | –37 | | | –53 | –249 | –214 | –1,125 |
| Exchange rate differences | 1 | | | | –1 | 17 | | | 1 | 3 | 1 | 20 |
| Changes in the composition of the group and other changes | | | | | 2 | | | | 1 | –1 | 3 | –1 |
| **Closing balance** | **174** | **494** | **8** | **27** | **1,381** | **1,042** | **1,244** | **1,075** | **1,961** | **2,749** | **4,768** | **5,387** |

1 Net gains/losses were recorded as ‘Valuation results and net trading income’ in the statement of profit or loss. The total amounts includes EUR 43 million of unrealised gains and losses recognised in the statement of profit or loss.
2 Revaluation recognised in other comprehensive income is included on the line ‘Net change in fair value of debt instruments at fair value through other comprehensive income’.
3 Prior period of Financial assets at FVOCI has been updated to improve consistency and comparability.

In 2019 the amounts reported on the line reclassifications relate to syndicated loans reclassed From trading assets to financial assets mandatory at FVPL.

## Changes in Level 3 Financial liabilities

| | Trading liabilities | | Non-trading derivatives | | Financial liabilities designated as at fair value through profit or loss | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Opening balance | 122 | 1,073 | 80 | 68 | 708 | 101 | 910 | 1,242 |
| Effect of change in accounting policy due to the implementation of IFRS 9 | | | | 4 | | 0 | | 4 |
| Realised gain/loss recognised in the statement of profit or loss during the period[1] | 102 | –67 | –16 | 8 | 32 | 1 | 118 | –58 |
| Issue of liabilities | 72 | 42 | 46 | | 35 | 545 | 154 | 587 |
| Early repayment of liabilities | –30 | –87 | –0 | | –10 | –20 | –40 | –106 |
| Maturity/settlement | –32 | –37 | | | –479 | –11 | –511 | –49 |
| Reclassifications | | – | | | | | | |
| Transfers into Level 3 | 13 | 39 | | | 49 | 92 | 62 | 131 |
| Transfers out of Level 3 | –52 | –844 | | | –150 | | –202 | –844 |
| Exchange rate differences | | –0 | | | | –0 | | –0 |
| Changes in the composition of the group and other changes | – | 2 | | | | | | 2 |
| **Closing balance** | **195** | **122** | **110** | **80** | **184** | **708** | **490** | **910** |

1 Net gains/losses were recorded as 'Valuation results and net trading income' in the statement of profit or loss. The total amount includes EUR 115 million of unrealised gains and losses recognised in the statement of profit or loss.

In 2019 and 2018, financial liabilities mainly repo's were transferred out of Level 3 mainly due to the valuation not being significantly impacted by unobservable inputs.

In 2018, financial liabilities transferred out of Level 3 mainly relate to swap positions revised to Level 2 based on the ability to demonstrate independent sourcing of observable inputs for swap pricing requirements.

### Recognition of unrealised gains and losses in Level 3

Amounts recognised in the statement of profit or loss relating to unrealised gains and losses during the year that relates to Level 3 assets and liabilities are included in the line item 'Valuation results and net trading income' in the statement of profit or loss.

Unrealised gains and losses that relate to 'Financial assets at fair value through other comprehensive income' (2019 and 2018) are included in the Revaluation reserve – Equity securities at fair value through other comprehensive income or Debt Instruments at fair value through other comprehensive income (2019 and 2018).

### Level 3 Financial assets and liabilities

Financial assets measured at fair value in the statement of financial position as at 31 December 2019 of EUR 131 billion includes an amount of EUR 4.8 billion (3.6%) which is classified as Level 3 (31 December 2018: EUR 5.4 billion, being 3.6%). Changes in Level 3 from 31 December 2018 to 31 December 2019 are detailed above in the table Changes in Level 3 Financial assets.

Financial liabilities measured at fair value in the statement of financial position as at 31 December 2019 of EUR 78 billion includes an amount of EUR 0.5 billion (0.6%) which is classified as Level 3 (31 December 2018: EUR 0.9 billion, being 1.0%). Changes in Level 3 from 31 December 2018 to 31 December 2019 are disclosed above in the table 'Changes in Level 3 Financial liabilities'.
Financial assets and liabilities in Level 3 include both assets and liabilities for which the fair value was determined using (i) valuation techniques that incorporate unobservable inputs as well as (ii) quoted prices, which have been adjusted to reflect that the market was not actively trading at or around the balance sheet date. Unobservable inputs are inputs which are based on ING's own assumptions about the factors that market participants would use in pricing an asset or liability, developed based on the best information available in the circumstances. Unobservable inputs may include volatility, correlation, spreads to discount rates, default rates and recovery rates, prepayment rates, and certain credit spreads. Valuation techniques that incorporate unobservable inputs are sensitive to the inputs used.

Of the total amount of financial assets classified as Level 3 as at 31 December 2019 of EUR 4.8 billion (31 December 2018: EUR 5.4 billion), an amount of EUR 2.5 billion (52.6%) (31 December 2018: EUR 3.4 billion, being 63.2%) is based on unadjusted quoted prices in inactive markets. As ING does not generally adjust quoted prices using its own inputs, there is no significant sensitivity to ING's own unobservable inputs.

Furthermore, Level 3 financial assets includes approximately EUR 1.3 billion (31 December 2018: EUR 1.1 billion) which relates to financial assets that are part of structures that are designed to be fully neutral in terms of market risk. Such structures include various financial assets and liabilities for which the overall sensitivity to market risk is insignificant. Whereas the fair value of individual components of these structures may be determined using different techniques and the fair value of each of the components of these structures may be sensitive to unobservable inputs, the overall sensitivity is by design not significant.

The remaining EUR 1.0 billion (31 December 2018: EUR 0.8 billion) of the fair value classified in Level 3 financial assets is established using valuation techniques that incorporates certain inputs that are unobservable.

Of the total amount of financial liabilities classified as Level 3 as at 31 December 2019 of EUR 0.5 billion (31 December 2018: EUR 0.9 billion), an amount of EUR 0.2 billion (39.3%) (31 December 2018: EUR 0.7 billion, being 82.0%) is based on unadjusted quoted prices in inactive markets. As ING does not generally adjust quoted prices using its own inputs, there is no significant sensitivity to ING's own unobservable inputs.

Furthermore, Level 3 financial liabilities includes approximately EUR 0.1 billion (31 December 2018: EUR 0.1 billion) which relates to financial liabilities that are part of structures that are designed to be fully neutral in terms of market risk. As explained above, the fair value of each of the components of these structures may be sensitive to unobservable inputs, but the overall sensitivity is by design not significant.

The remaining EUR 0.2 billion (31 December 2018: EUR 0.1 billion) of the fair value classified in Level 3 financial liabilities is established using valuation techniques that incorporates certain inputs that are unobservable.

The table below provides a summary of the valuation techniques, key unobservable inputs and the lower and upper range of such unobservable inputs, by type of Level 3 asset/liability. The lower and upper range mentioned in the overview represent the lowest and highest variance of the respective valuation input as actually used in the valuation of the different financial instruments. Amounts and percentages stated are unweighted. The range can vary from period to period subject to market movements and change in Level 3 position. Lower and upper bounds reflect the variability of Level 3 positions and their underlying valuation inputs in the portfolio, but do not adequately reflect their level of valuation uncertainty. For valuation uncertainty assessment, reference is made to section Sensitivity analysis of unobservable inputs (Level 3).

## Valuation techniques and range of unobservable inputs (Level 3)

| | Assets | | Liabilities | | Valuation techniques | Significant unobservable inputs | Lower range | | Upper range | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | | | 2019 | 2018 | 2019 | 2018 |
| **At fair value through profit or loss** | | | | | | | | | | |
| Debt securities | 920 | 807 | | 3 | Price based | Price (%) | 0% | 0% | 121% | 105% |
| | | | | | Net asset value | Price (%) | n/a | 0% | n/a | 0% |
| | | | | | Present value techniques | Credit spread (bps) | n/a | 131 | n/a | 131 |
| | | | | | Loan pricing model | Credit spread (bps) | n/a | n/a | n/a | n/a |
| Equity securities | 146 | 162 | 1 | | Price based | Price | 0 | 0 | 5,475 | 5,475 |
| Loans and advances | 1,576 | 1,047 | | 15 | Price based | Price (%) | 0% | 1% | 104% | 102% |
| | | | | | Present value techniques | Price (%) | n/a | 100% | n/a | 100% |
| | | | | | | Credit spread (bps) | 1 | 19 | 250 | 550 |
| (Reverse) repo's | 3 | 481 | 1 | 424 | Present value techniques | Price (%) | 4% | 3% | 4% | 4% |
| Structured notes | | | 184 | 284 | Price based | Price (%) | 83% | 77% | 124% | 108% |
| | | | | | Net asset value | Price (%) | n/a | n/a | n/a | n/a |
| | | | | | Option pricing model | Equity volatility (%) | 13% | 13% | 20% | 34% |
| | | | | | | Equity/Equity correlation | 0.6 | 0.6 | 0.8 | 0.9 |
| | | | | | | Equity/FX correlation | -0.5 | -0.7 | 0.3 | 0.5 |
| | | | | | | Dividend yield (%) | 2% | 1% | 4% | 5% |
| | | | | | | Interest rate volatility (bps) | n/a | 49 | n/a | 86 |
| | | | | | | IR/IR correlation | n/a | 0.8 | n/a | 0.8 |
| | | | | | Present value techniques | Implied correlation | n/a | -0.7 | n/a | 0.7 |
| Derivatives | | | | | | | | | | |
| – Rates | 13 | 57 | 68 | 39 | Option pricing model | Interest rate volatility (bps) | 17 | 23 | 137 | 300 |
| | | | | | | Interest rate correlation | n/a | 0.8 | n/a | 0.8 |
| | | | | | | IR/INF correlation | n/a | n/a | n/a | n/a |
| | | | | | Present value techniques | Reset spread (%) | 2% | 2% | 2% | 2% |
| | | | | | | Prepayment rate (%) | n/a | n/a | n/a | n/a |
| | | | | | | Inflation rate (%) | n/a | n/a | n/a | n/a |
| | | | | | | Credit spread (bps) | n/a | 46 | n/a | 46 |
| – FX | 1 | | | | Present value techniques | Inflation rate (%) | n/a | n/a | n/a | n/a |
| | | | | | Option pricing model | FX volatility (bps) | 5 | 0% | 8 | 0% |

**Valuation techniques and range of unobservable inputs (Level 3) – continued**

| | Assets | | Liabilities | | Valuation techniques | Significant unobservable inputs | Lower range | | Upper range | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | | | 2019 | 2018 | 2019 | 2018 |
| – Credit | 102 | 67 | 183 | 86 | Present value techniques | Credit spread (bps) | 2 | 8 | 11054 | 364 |
| | | | | | | Implied correlation | n/a | 0.7 | n/a | 0.7 |
| | | | | | | Jump rate (%) | 12% | 12% | 12% | 12% |
| | | | | | Price based | Price (%) | n/a | n/a | n/a | n/a |
| – Equity | 42 | 68 | 50 | 54 | Option pricing model | Equity volatility (%) | 4% | 4% | 84% | 94% |
| | | | | | | Equity/Equity correlation | | 0.2 | | 0.9 |
| | | | | | | Equity/FX correlation | –0.6 | –0.8 | 0.6 | 0.5 |
| | | | | | | Dividend yield (%) | 0% | 0% | 13% | 13% |
| – Other | 3 | 2 | 3 | 5 | Option pricing model | Commodity volatility (%) | 11% | 12% | 53% | 79% |
| | | | | | | Com/Com correlation | 0.3 | 0.3 | 0.9 | 0.9 |
| | | | | | | Com/FX correlation | –0.5 | –0.5 | –0.3 | –0.5 |
| **At fair value through other comprehensive income** | | | | | | | | | | |
| – Debt | | | | | Price based | Price (%) | n/a | n/a | n/a | n/a |
| – Loans and advances | 1,680 | 2,379 | | | Present value techniques | Prepayment rate (%) | 6% | 6% | 6% | 6% |
| – Equity | 282 | 317 | | | Present value techniques | Credit spread (%) | n/a | 3.2 | n/a | 3.2 |
| | | | | | | Inflation rate (%) | 3% | 3% | 3% | 3% |
| | | | | | | Price (%) | 1 | | 187 | n/a |
| | | | | | | Other | n/a | 63 | n/a | 80 |
| Total | **4,768** | **5,387** | **490** | **910** | | | | | | |

## Non-listed equity investments

Level 3 equity securities mainly include corporate investments, fund investments and other equity securities which are not traded in active markets. In the absence of an active market, fair values are estimated on the basis of the analysis of fund managers reports, company's financial position, future prospects, and other factors, considering valuations of similar positions or by the reference to acquisition cost of the position. For equity securities best market practice will be applied using the most relevant valuation method.

All non-listed equity investments, including investments in private equity funds, are subject to a standard review framework which ensures that valuations reflect fair values.

## Price

For securities where market prices are not available fair value is measured by comparison with observable pricing data from similar instruments. Prices of 0% are distressed to the point that no recovery is expected, while prices significantly in excess of 100% or par are expected to pay a good yield.

## Credit spreads

Credit spread is the premium above a benchmark interest rate, typically LIBOR or relevant Treasury instrument, required by the market participant to accept a lower credit quality. Higher credit spreads indicate lower credit quality and a lower value of an asset.

## Volatility

Volatility is a measure for variation of the price of a financial instrument or other valuation input over time. Volatility is one of the key inputs in option pricing models. Typically, the higher the volatility, the higher value of the option. Volatility varies by the underlying reference (equity, commodity, foreign currency and interest rates), by strike, and maturity of the option. The minimum level of volatility is 0% and there is no theoretical maximum.

## Correlation

Correlation is a measure of dependence between two underlying references which is relevant for valuing derivatives and other instruments which have more than one underlying reference. For example, correlation between underlying equity names may be a relevant input parameter for basket equity option pricing models. High positive correlation (close to 1) indicates strong positive (statistical) relationship between underlyings, implying they typically move in the same direction. High negative correlation, on the other hand, implies that underlyings typically move in opposite directions.

## Interest rates

Examples of interest rate related unobservable inputs are prepayment rates, reset rates and inflation rates.
Prepayment rate and reset spread are key inputs to mortgage linked prepayment swaps valuation. Prepayment rate is the estimated rate at which mortgage borrowers will repay their mortgages early, e.g. 5% per year. Reset spread is the future spread at which mortgages will re-price at interest rate reset dates.

Inflation rate is a key input to inflation linked instruments. Inflation linked instruments protect against price inflation and are denominated and indexed to investment units. Interest payments would be based on the inflation index and nominal rate in order to receive/pay the real rate of return. A rise in nominal coupon payments is a result of an increase in inflation expectations, real rates, or both. As markets for these inflation linked derivatives are illiquid, the valuation parameters become unobservable.

## Dividend yield

Dividend yield is an important input for equity option pricing models showing how much dividends a company is expected to pay out each year relative to its share price. Dividend yields are generally expressed as an annualised percentage of share price.

## Sensitivity analysis of unobservable inputs (Level 3)

Where the fair value of a financial instrument is determined using inputs which are unobservable and which have a more than insignificant impact on the fair value of the instrument, the actual value of those inputs at the balance date may be drawn from a range of reasonably possible alternatives. In line with market practice the upper and lower bounds of the range of alternative input values reflect a 90% level of valuation certainty. The actual levels chosen for the unobservable inputs in preparing the financial statements are consistent with the valuation methodology used for fair valued financial instruments.

If ING had used input values from the upper and lower bound of this range of reasonably possible alternative input values when valuing these instruments as of 31 December 2019, then the impact would have been higher or lower as indicated below. The purpose of this disclosure is to present the possible impact of a change of unobservable inputs in the fair value of financial instruments where unobservable inputs are significant to the valuation.

As ING has chosen to apply a 90% confidence level for its IFRS valuation of fair valued financial instruments, the downward valuation uncertainty has become immaterial, whereas the potential upward valuation uncertainty, reflecting a potential profit, has increased.

In practice valuation uncertainty is measured and managed per exposure to individual valuation inputs (i.e. risk factors) at portfolio level across different product categories. Where the disclosure looks at individual Level 3 inputs the actual valuation adjustments may also reflect the benefits of portfolio offsets.

Because of the approach taken, the valuation uncertainty in the table below is broken down by related risk class rather than by product.

In reality some valuation inputs are interrelated and it would be unlikely that all unobservable inputs would ever be simultaneously at the limits of their respective ranges of reasonably possible alternatives. Therefore it can be assumed that the estimates in the table below show a greater fair value uncertainty than the realistic position at year end assuming normal circumstances/normal markets.

Also, this disclosure does not attempt to indicate or predict future fair value movement. The numbers in isolation give limited information as in most cases these Level 3 assets and liabilities should be seen in combination with other instruments (for example as a hedge) that are classified as Level 2.

The possible impact of a change of unobservable inputs in the fair value of financial instruments at fair value through other comprehensive income are estimated to be immaterial.

**Sensitivity analysis of Level 3 instruments**

| | Positive fair value movements from using reasonable possible alternatives | | Negative fair value movements from using reasonable possible alternatives | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| **Fair value through profit or loss** | | | | |
| Equity (equity derivatives, structured notes) | 35 | 60 | 0 | 4 |
| Interest rates (Rates derivatives, FX derivatives) | 40 | 43 | 0 | |
| Credit (Debt securities, Loans, structured notes, credit derivatives) | 10 | 39 | 0 | |
| | **85** | **142** | **–** | **4** |

## Other financial instruments

The fair values of the financial instruments carried at amortised cost in the statement of financial position, but for which fair values are disclosed are determined as follows:

**Methods applied in determining fair values of financial assets and liabilities (carried at amortised cost)**

| | Level 1 | | Level 2 | | Level 3 | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| **Financial Assets** | | | | | | | | |
| Loans and advances to banks[1] | 728 | 445 | 11,469 | 7,152 | 20,570 | 20,742 | 32,767 | 28,339 |
| Loans and advances to customers[1] | 165 | 138 | 12,622 | 14,656 | 588,063 | 567,016 | 600,850 | 581,810 |
| Securities at amortised cost | 43,784 | 43,550 | 2,304 | 3,024 | 840 | 1,242 | 46,928 | 47,815 |
| | **44,677** | **44,132** | **26,395** | **24,832** | **609,473** | **589,000** | **680,545** | **657,964** |
| | | | | | | | | |
| **Financial liabilities** | | | | | | | | |
| Deposits from banks [1] | 0 | 128 | 23,900 | 24,433 | 6,589 | 7,314 | 30,490 | 31,875 |
| Customer deposits [1] | 5,666 | 6,695 | 18,003 | 26,645 | 20,760 | 22,172 | 44,429 | 55,512 |
| Debt securities in issue | 57,563 | 47,985 | 42,638 | 52,194 | 18,642 | 19,713 | 118,844 | 119,893 |
| Subordinated loans | 14,552 | 10,840 | 2,701 | 2,679 | | 0 | 17,253 | 13,519 |
| | **77,781** | **65,648** | **87,243** | **105,951** | **45,992** | **49,199** | **211,016** | **220,799** |

1 Financial assets and liabilities that are on demand are excluded from the fair value hierarchy as their fair value approximates the carrying value.

## b) Non-financial assets and liabilities

ING Group's non-financial assets comprise Investments in associates and joint ventures, Property in own use, Investment property as included in the statement of financial position in the line items Investments in associates and joint ventures, Property and equipment, and Other assets respectively.

Investments in associates and joint ventures are accounted for using the equity method. For further information, reference is made to Note 8 'Investments in associates and joint ventures'. Other non-financial assets (Property in own use, and Investment properties) are recognised at fair value at the balance sheet date.

As at 31 December 2019, the estimated fair value of Property in own use and Investment property amounts to EUR 757 million (2018: EUR 780 million) and EUR 46 million (2018: EUR 54 million) respectively and is categorised as Level 3 of the fair value hierarchy on the basis of methods applied in determining the fair values.

Amounts recognised in the statement of profit or loss relating to unrealised gains and losses during the year that relate to Level 3 non-financial assets are included in the statement of profit or loss as follows:

- Impairments on Property in own use are included in Other operating expenses - Impairments and reversals on property and equipment and intangibles ; and
- Changes in the fair value of Investment property are included in Investment income.

Unrealised gains and losses on Property in own use are included in the Revaluation reserve – Property in own use reserve.
For amounts recognised in the Statement of profit or loss and other changes in non-financial assets during the year, reference is made to Note 9 'Property and equipment' and Note 11 'Other assets'.

As at 31 December 2019, ING Group has no non-financial liabilities measured at fair value (2018: none).

# 39 Derivatives and hedge accounting

## Use of derivatives

ING Group uses derivatives for economic hedging purposes to manage its asset and liability portfolios and structural risk positions. The primary objective of ING Group's hedging activities is to manage the risks which arises from structural imbalances in the duration and other profiles of its assets and liabilities. The objective of economic hedging is to enter into positions with an opposite risk profile to an identified risk exposure to reduce that exposure. The main risks which are being hedged are interest rate risk and foreign currency exchange rate risk. These risks are primarily hedged with interest rate swaps, cross-currency swaps and foreign exchange forwards/swaps.

ING Group uses credit derivatives to manage its economic exposure to credit risk, including total return swaps and credit default swaps, to sell or buy protection for credit risk exposures in the loan, investment, and trading portfolios. Hedge accounting is not applied in relation to these credit derivatives.

## Hedge accounting

Derivatives that qualify for hedge accounting under IFRS are classified and accounted for in accordance with the nature of the instrument hedged and the type of IFRS hedge model that is applicable. The three models applicable under IFRS are: fair value hedge accounting, cash flow hedge accounting, and hedge accounting of a net investment in a foreign operation. How and to what extent these models are applied are described under the relevant headings below. The company's detailed accounting policies for these three hedge models are set out in paragraph 1.6 'Financial instruments' of Note 1 'Basis of preparation and accounting policies'.

### IBOR transition

Following the decision by global regulators to seek alternatives for current critical benchmarks in use in various jurisdiction in order to comply with the EU Benchmarks Regulation, the IBOR transition program of ING was initiated in 2018 to prepare the Group for the reform.

Reference is made to note Risk management/ IBOR Transition for more information on to what rates ING is exposed and on how ING is managing the transition to alternative benchmark rates.

At the reporting date, ING Group assessed the extent to which hedge relationships are subject to uncertainties driven by the IBOR reform.
ING applies fair value and cash flow hedge accounting in accordance with IAS 39, and interest rate and foreign currency risks are designated as hedged risks in various micro and macro models. Except for EONIA and EUR LIBOR all IBOR's in scope of ING's program are a component of either hedging instrument and/or hedged item where the interest rate and/or foreign currency risk are the designated hedged risk. The hedged exposures are mainly loan portfolio's, issued debt securities and purchased debt instruments.

ING Group early adopted the amendments to IAS 39 issued in September 2019 to these hedging relationships directly affected by IBOR reform. This excludes EURIBOR hedges as EURIBOR is Benchmarks Regulation compliant.

LIBOR indexed fair value and cash flow hedges are expected to be directly affected by the uncertainties arising from the IBOR reform. In particular, uncertainties over the timing and amount of the replacement rate may impact the effectiveness and highly probable assessment.

For these affected fair value and cash flow hedge relationships ING Group assumes that the LIBOR based cash flows from the hedging instrument and hedged item will remain unaffected.
The same assumption is used while assessing the likelihood of occurrence of the forecast transaction that are subject to cash flow hedges. The cash flow hedges directly impacted by the IBOR reform still meet the highly probable requirement assuming the respective LIBOR benchmark on which the hedged cash flows are based are not altered as a result of the reform.

The following table contains details of the gross notional amounts of hedging instruments as at 31 December 2019 that are used in the Group's hedge accounting relationships for which the amendments to IAS39 were applied:

**Hedging instruments in EUR**

| Benchmark | Notional Amount |
|---|---|
| USD LIBOR | 45,496 |
| GBP LIBOR | 2,184 |
| JPY LIBOR | 2,922 |
| CHF LIBOR | 313 |

Approximately 68% of the above notional amounts have a maturity date beyond 2021.

The notional amounts of the derivative hedging instruments (in above table) provide a close approximation of the extent of the risk exposure ING manages through these hedging relationships.

### Fair value hedge accounting

ING Group's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate instruments due to movements in market interest rates. ING Group's approach to manage market risk, including interest rate risk, is discussed in 'Risk management – Market risk'. ING Group's exposure to interest rate risk is disclosed in paragraph 'Interest rate risk in banking book'.

By using derivative financial instruments to hedge exposures to changes in interest rates, ING Group also exposes itself to credit risk of the derivative counterparty, which is not offset by the hedged item. ING Group minimises counterparty credit risk in derivative instruments by clearing most of the derivatives through Central Clearing Counterparties. In addition ING Group only enters into transactions with high-quality counterparties and requires posting collateral.

ING Group applies fair value hedge accounting on micro level in which one hedged item is hedged with one or multiple hedging instruments as well as on macro level whereby a portfolio of items is hedged with multiple hedging instruments. For these macro hedges of interest rate risk ING applies the EU carve-out. The EU 'carve-out' for macro hedging enables a group of derivatives (or proportions) to be viewed in combination and jointly designated as the hedging instrument and removes some of the limitations in fair value hedge accounting relating to hedging core deposits and under-hedging strategies. In retail operations, exposure on retail funding (savings and current accounts) and retail lending (mortgages) is initially offset. The remaining exposure is hedged in a portfolio hedge, using the EU carve-out, in which a portion of the retail lending portfolio and core deposits are designated as a hedged item for hedge accounting purposes.

For portfolio hedges the fair value is projected based on contractual terms and other variables including prepayment expectations. These projected fair value of the portfolios form the basis for identifying the notional amount subject to interest rate risk that is designated under fair value hedge accounting.

Micro fair value hedge accounting is mainly applied on issued debt securities and purchased debt instruments for hedging interest rate risk.

Before fair value hedge accounting is applied by ING Group, ING Group determines whether an economic relationship between the hedged item and the hedging instrument exists based on an evaluation of the quantitative characteristics of these items and the hedged risk that is supported by quantitative analysis. ING Group considers whether the critical terms of the hedged item and hedging instrument closely align when assessing the presence of an economic relationship. ING Group evaluates whether the fair value of the hedged item and the hedging instrument respond similarly to similar risks. In addition ING is mainly using regression analysis to assess whether the hedging instrument is expected to be and has been highly effective in offsetting changes in the fair value of the hedged item.

For the macro hedge on the mortgage portfolio ING Group follows a dynamic hedging strategy. This means that on monthly basis, based on the new portfolio projection, the hedging relationship is renewed. From an operational point of view, the existing hedging relationship is adjusted based on the new portfolio projection and additional hedging instruments are added to the hedging relationship.

ING Group uses the following derivative financial instruments in a fair value hedge accounting relationship:

**Gross carring value of derivatives designated under fair value hedge accounting**

| | Assets 2019 | Liabilities 2019 | Assets 2018 | Liabilities 2018 |
|---|---|---|---|---|
| **As at 31 December** | | | | |
| Hedging instrument on interest rate risk | | | | |
| – Interest rate swaps | 12,085 | 13,334 | 8,596 | 11,282 |
| – Other interest derivatives | 87 | 70 | 78 | 65 |

The derivatives used for fair value hedge accounting are included in the statement of financial position line-item ‘Financial assets at fair value through profit or loss – Non-trading derivatives’ for EUR 524 million (2018: EUR 650 million) respectively ‘Financial liabilities at fair value through profit or loss – Non-trading derivatives’ EUR 873 million (2018: EUR 1,035 million). The remaining derivatives are offset with other derivatives and collaterals paid or received.

For our main currencies the average fixed rate for interest rate swaps used in fair value hedge accounting are 0.93% (2018: 1.14%) for EUR and 3.55% (2018: 3.38%) for USD.

The following table shows the net notional amount of derivatives designated in fair value hedging split into the maturity of the instruments. The net notional amounts presented in the table are a combination of payer (-) and receiver (+) swaps.

**Maturity derivatives designated in fair value hedging**

| As at 31 December 2019 | Less than 1 month | 1 to 3 months | 3 to 12 months | 1 to 2 year | 2 to 3 years | 3 to 4 years | 4 to 5 years | >5 years | Total |
|---|---|---|---|---|---|---|---|---|---|
| Hedging instrument on interest rate risk | | | | | | | | | |
| – Interest rate swaps | –59 | 52 | 8,574 | 9,791 | 6,169 | 8,727 | 3,161 | 1,832 | 38,247 |
| – Other interest derivatives | –20 | –22 | 58 | –242 | –404 | –290 | –44 | 1,075 | 110 |
| **As at 31 December 2018** | | | | | | | | | |
| Hedging instrument on interest rate risk | | | | | | | | | |
| – Interest rate swaps | 560 | –14 | –7,819 | 7,277 | 514 | 5,097 | 11,082 | –10,083 | 6,615 |
| – Other interest derivatives | –11 | –53 | –101 | –55 | –228 | –325 | –325 | –51 | –1,148 |

Gains and losses on derivatives designated under fair value hedge accounting are recognised in the statement of profit or loss. The effective portion of the fair value change on the hedged item is also recognised in the statement of profit or loss. As a result, only the net accounting ineffectiveness has an impact on the net result.

## Fair value hedging – impact on the statement of profit or loss and other comprehensive income

| | Carrying amount of the hedged item | | Accumulated amount of fair value hedge adjustment on the hedged item included in the carrying amount of the hedged item | | Change in fair value used for measuring ineffectiveness for the period | Change in fair value hedge instruments | Hedge ineffectiveness recognised in the statement of profit or loss, gain (+) / loss (-) |
|---|---|---|---|---|---|---|---|
| | Assets | Liabilities | Assets | Liabilities | | | |
| **As at 31 December 2019** | | | | | | | |
| Interest rate risk | | | | | | | |
| – Amounts due from banks | | | | | –0 | | |
| – Debt securities at fair value through other comprehensive income | 23,281 | | n/a | | 357 | | |
| – Loans at FVOCI | 410 | | n/a | | –8 | | |
| – Loans and advances to customers | 27,192 | | 3,318 | | 922 | | |
| – Debt instruments at amortised cost | 6,133 | | 429 | | 356 | | |
| – Debt securities in issue | | 62,236 | | 2,706 | –1,018 | | |
| – Subordinated loans | | 14,970 | | 261 | –201 | | |
| – Amounts due to banks | | 8,783 | | 38 | 1 | | |
| – Customer deposits and other funds on deposit | | 3,233 | | –43 | –13 | | |
| – Discontinued hedges | | | 1,315 | 129 | | | |
| **Total** | **57,016** | **89,222** | **5,062** | **3,092** | **396** | **–320** | **76** |
| **As at 31 December 2018** | | | | | | | |
| Interest rate risk | | | | | | | |
| – Amounts due from banks | | | | | –1 | | |
| – Debt securities at fair value through other comprehensive income | 18,471 | | n/a | | 1 | | |
| – Loans at FVOCI | 480 | | n/a | | | | |
| – Loans and advances to customers | 49,258 | | 2,817 | | –10 | | |
| – Debt instruments at amortised cost | 16,843 | | 687 | | –91 | | |
| – Debt securities in issue | | 55,081 | | 1,659 | 53 | | |
| – Subordinated loans | | 12,799 | | 53 | 57 | | |
| – Amounts due to banks | | 17,717 | | 55 | –52 | | |
| – Customer deposits and other funds on deposit | | 3,454 | | 119 | –11 | | |
| – Discontinued hedges | | | 272 | –35 | | | |
| **Total** | **85,052** | **89,051** | **3,776** | **1,851** | **–52** | **61** | **8** |

The main sources of ineffectiveness are:
- differences in maturities of the hedged item(s) and hedging instrument(s);
- different interest rate curves applied to discount the hedged item(s) and hedging instrument(s);
- differences in timing of cash flows of the hedged item(s) and hedging instrument(s).

Additionally, for portfolio (macro) fair value hedges of ING Group's fixed rate mortgage portfolio, ineffectiveness also arises from the disparity between expected and actual prepayments (prepayment risk).

There were no other sources of ineffectiveness in these hedging relationships.

As a result of interest rate developments in 2019 ING Group de-designated fair value hedge accounting portfolios with a total notional value of approximately EUR 25 billion.

### Cash flow hedge accounting

ING Group's cash flow hedges mainly consist of interest rate swaps and cross-currency swaps that are used to protect against the exposure to variability in future cash flows on non-trading assets and liabilities that bear interest at variable rates or are expected to be refunded or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected for each portfolio of financial assets and liabilities, based on contractual terms and other variables including estimates of prepayments. These projected cash flows form the basis for identifying the notional amount subject to interest rate risk or foreign currency exchange rate risk that is designated under cash flow hedge accounting.

ING Group's approach to manage market risk, including interest rate risk and foreign currency exchange rate risk, is discussed in 'Risk management – Credit risk and Market risk'. ING Group determines the amount of the exposures to which it applies hedge accounting by assessing the potential impact of changes in interest rates and foreign currency exchange rates on the future cash flows from its floating-rate assets and liabilities. This assessment is performed using analytical techniques.

As noted above for fair value hedges, by using derivative financial instruments to hedge exposures to changes in interest rates and foreign currency exchange rates, ING Group exposes itself to credit risk of the derivative counterparty, which is not offset by the hedged items. This exposure is managed similarly to that for fair value hedges.

Gains and losses on the effective portions of derivatives designated under cash flow hedge accounting are recognised in Other Comprehensive Income. Interest cash flows on these derivatives are recognised in the statement of profit or loss in 'Net interest income' consistent with the manner in which the forecasted cash flows affect net result. The gains and losses on ineffective portions of such derivatives are recognised immediately in the statement of profit or loss in 'Valuation results and net trading income'.

ING Group determines an economic relationship between the cash flows of the hedged item and the hedging instrument based on an evaluation of the quantitative characteristics of these items and the hedged risk that is supported by quantitative analysis. ING Group considers whether the critical terms of the hedged item and hedging instrument closely align when assessing the presence of an economic relationship. ING Group evaluates whether the cash flows of the hedged item and the hedging instrument respond similarly to the hedged risk, such as the benchmark interest rate of foreign currency. In addition (for macro FX hedging relationships) a regression analysis is performed to assess whether the hedging instrument is expected to be and has been highly effective in offsetting changes in the fair value of the hedged item.

ING Group uses the following derivative financial instruments in a cash flow hedge accounting relationship:

**Gross carrying value of derivatives used for cash flow hedge accounting**

| | Assets 2019 | Liabilities 2019 | Assets 2018 | Liabilities 2018 |
|---|---|---|---|---|
| **As at 31 December** | | | | |
| Hedging instrument on interest rate risk | | | | |
| – Interest rate swaps | 2,615 | 2,848 | 5,757 | 3,664 |
| Hedging instrument on combined interest and FX rate risk | | | | |
| – Cross currency interest rate derivatives | 358 | 158 | 204 | 154 |

The derivatives used for cash flow hedge accounting are included in the statement of financial position line-item 'Financial assets at fair value through profit or loss – Non-trading derivatives' EUR 677 million (2018: EUR 1,012 million) respectively 'Financial liabilities at fair value through profit or loss – Non-trading derivatives' EUR 339 million (2018: EUR 458 million). The remaining derivatives are offset with other derivatives and collaterals paid or received.

For the main currencies the average fixed rate for interest rate swaps used in cash flow hedge accounting are 0.54% (2018: 1.21%) for EUR, 2.38% (2018: 2.53%) for PLN, 2.51% (2018: 2.49%) for USD and 1.50% (2018: 1.97%) for AUD.
The average currency exchange rate for cross-currency swaps used in cash flow hedge accounting is for EUR/USD 1.11 (2018: 1.14) and for EUR/AUD 1.55 (2018: 1.52).

**Maturity derivatives designated in cash flow hedging**

| As at 31 December 2019 | Less than 1 month | 1 to 3 months | 3 to 12 months | 1 to 2 year | 2 to 3 years | 3 to 4 years | 4 to 5 years | >5 years | Total |
|---|---|---|---|---|---|---|---|---|---|
| Hedging instrument on interest rate risk | | | | | | | | | |
| – Interest rate swaps | –401 | 580 | –2,591 | –6,512 | –5,541 | –5,788 | –5,364 | –23,009 | –48,627 |
| Hedging instrument on combined interest and FX rate risk | | | | | | | | | |
| – Cross-currency interest rate derivatives | | –1,098 | –2,068 | –5,044 | –2,509 | –1,473 | 3 | 104 | –12,086 |
| **As at 31 December 2018** | | | | | | | | | |
| Hedging instrument on interest rate risk | | | | | | | | | |
| – Interest rate swaps | –107 | –2,546 | –7,107 | –5,591 | –9,883 | –7,928 | –8,980 | –29,629 | –71,771 |
| Hedging instrument on combined interest and FX rate risk | | | | | | | | | |
| – Cross-currency interest rate derivatives | 5 | 48 | –601 | –4,461 | –5,622 | –2,647 | –793 | –239 | –14,311 |

The following table shows the cash flow hedge accounting impact on profit or loss and comprehensive income:

**Cash flow hedge accounting – impact on the statement of profit or loss and other comprehensive income**

| | Change in value used for calculating hedge ineffectiveness for the period | Gross Carrying amount cash flow hedge reserve at the end of the reporting period | Amount reclassified from CFH reserve to profit or loss | Cash flow is no longer expected to occur | Change in value of hedging instrument recognised in OCI | Hedge ineffectiveness recognised in the statement of profit or loss, gain (+) / Loss (-) |
|---|---|---|---|---|---|---|
| **As at 31 December 2019** | | | | | | |
| Interest rate risk on; | | | | | | |
| – Floating rate lending | –940 | 1,395 | 357 | | | |
| – Floating rate borrowing | 133 | –198 | –201 | | | |
| – Other | –211 | 169 | 53 | | | |
| – Discontinued hedges | | 316 | –112 | | | |
| **Total interest rate risk** | **–1,018** | **1,682** | **97** | **–** | **851** | **44** |
| Combined interest and currency exchange rate risk on; | | | | | | |
| – Floating rate lending | –22 | –42 | –498 | | | |
| – Floating rate borrowing | 12 | 15 | –12 | –1 | | |
| – Other | 1 | –1 | –4 | | | |
| – Discontinued hedges | | | –3 | | | |
| **Total combined interest and exchange rate risk** | **–10** | **–28** | **–517** | **–1** | **475** | **3** |
| **Total cash flow hedge** | **–1,028** | **1,654** | **–420** | **–1** | **1,326** | **47** |
| | | | | | | |
| **As at 31 December 2018** | | | | | | |
| Interest rate risk on; | | | | | | |
| – Floating rate lending | –540 | 730 | 280 | 2 | | |
| – Floating rate borrowing | 51 | 5 | –47 | | | |
| – Other | –72 | 101 | 34 | | | |
| – Discontinued hedges | | | –25 | –2 | | |
| **Total interest rate risk** | **–561** | **836** | **242** | **1** | **231** | **–18** |
| Combined interest and currency exchange rate risk on; | | | | | | |
| – Floating rate lending | 53 | –60 | –377 | | | |
| – Floating rate borrowing | –35 | 47 | –1 | | | |
| **Total combined interest and exchange rate risk** | **18** | **–13** | **–378** | **–** | **347** | **–1** |
| **Total cash flow hedge** | **–543** | **823** | **–137** | **1** | **578** | **–19** |

The main sources of ineffectiveness for cash flow hedges are:

- differences in timing of cash flows of the hedged item(s) and hedging instrument(s);
- mismatches in reset frequency between hedged item and hedging instrument.

As a result of interest rate developments in 2019 ING Group de-designated cash flow hedge accounting portfolios with a total notional value of approximately EUR 25 billion.

### Hedges of net investments in foreign operations

A foreign currency exposure arises from a net investment in subsidiaries that have a different functional currency from that of ING Group. The risk arises from the fluctuation in spot exchange rates between the functional currency of the subsidiaries and ING Group's functional currency, which causes the amount of the net investment to vary in the consolidated financial statements of ING Group. This risk may have a significant impact on ING Group's financial statements. ING Group's policy is to hedge these exposures only when not doing so be expected to have a significant impact on the regulatory capital ratios of ING Group and its subsidiaries.

ING Group's net investment hedges principally consist of derivatives (including currency forwards and swaps) and non-derivative financial instruments such as foreign currency denominated funding. When the hedging instrument is foreign currency denominated debt, ING Group assesses effectiveness by comparing past changes in the carrying amount of the debt that are attributable to a change in the spot rate with past changes in the investment in the foreign operation due to movement in the spot rate (the offset method).

Gains and losses on the effective portions of derivatives designated under net investment hedge accounting are recognised in Other Comprehensive Income.  The balance in equity is recognised in the statement of profit or loss when the related foreign subsidiary is disposed. The gains and losses on ineffective portions are recognised immediately in the statement of profit or loss.

ING Group has the following derivative financial instruments used for net investment hedging;

**Gross carrying value of derivatives used for net investment hedging**

| | Assets 2019 | Liabilities 2019 | Assets 2018 | Liabilities 2018 |
|---|---|---|---|---|
| **As at 31 December** | | | | |
| – FX forwards and futures | 23 | 51 | 41 | 16 |
| – Other FX derivatives | 0 | – | 0 | 0 |

The derivatives used for net investment hedge accounting are included in the statement of financial position line-item 'Financial assets at fair value through profit or loss – Non-trading derivatives' EUR 23 million (2018: EUR 41 million) respectively 'Financial liabilities at fair value through profit or loss – Non-trading derivatives' EUR 51 million (2018: EUR 17 million). The remaining derivatives are offset with other derivatives and collaterals paid or received.

For ING Group's main currencies the average exchange rates used in net investment hedge accounting for 2019 are EUR/USD 1.12 (2018:  1.18), EUR/PLN  4.30 (2018: 4.26), EUR/AUD 1.61 (2018: 1.58) and EUR/THB 34.79 (2018: 38.15)

The following table shows the notional amount of derivatives designated in net investment hedging split into the maturity of the instruments.

**Maturity derivatives designated in net investment hedging**

| | Less than 1month | 1 to 3 months | 3 to 12 months | 1 to 2 year | 2 to 3 years | 3 to 4 years | 4 to 5 years | >5 years | Total |
|---|---|---|---|---|---|---|---|---|---|
| **As at 31 December 2019** | | | | | | | | | |
| – FX forwards and futures | -3,179 | -999 | -54 | | | | | | -4,232 |
| **As at 31 December 2018[1]** | | | | | | | | | |
| – FX forwards and futures | -3,444 | -853 | | -54 | | | | | -4,351 |

1 The prior period has been updated to improve consistency and comparability.

The effect of the net investment hedge accounting in the statement of profit or loss and other comprehensive income is as follows:

**Net investment hedge accounting – Impact on statement of profit or loss and other comprehensive income**

| | Change in value used for calculating hedge ineffectiveness for the period | Gross Carrying amount net investment hedge reserve at the end of the reporting period | Hedged item affected statement of profit or loss | Change in value of hedging instrument recognised in OCI | Hedge ineffectiveness recognised in the statement of profit or loss, gain(+) / Loss(-) |
|---|---|---|---|---|---|
| **As at 31 December 2019** | | | | | |
| Net investments hedge | | | | | |
| - Investments in foreign operations | 134 | 440 | 44 | –134 | 0 |
| - Discontinued hedges | | –210 | | | |
| **As at 31 December 2018** | | | | | |
| Net investments hedge | | | | | |
| - Investments in foreign operations | –71 | 540 | | 71 | 2 |
| - Discontinued hedges | | –210 | | | |

## 40 Assets by contractual maturity

Amounts presented in these tables by contractual maturity are the amounts as presented in the statement of financial position and are discounted cash flows. Reference is made to ‘Risk Management – Funding and liquidity risk’.

## Assets by contractual maturity

| 2019 | Less than 1 month [1] | 1-3 months | 3-12 months | 1-5 years | Over 5 years | Maturity not applicable | Total |
|---|---|---|---|---|---|---|---|
| Cash and balances with central banks | 53,202 | | | | | | 53,202 |
| Loans and advances to banks | 22,820 | 3,100 | 5,090 | 3,729 | 397 | | 35,136 |
| Financial assets at fair value through profit or loss | | | | | | | |
| – Trading assets | 12,754 | 6,589 | 8,469 | 8,240 | 13,203 | | 49,254 |
| – Non-trading derivatives | 110 | 161 | 215 | 998 | 773 | | 2,257 |
| – Mandatorily at fair value through profit or loss | 22,645 | 13,784 | 2,357 | 1,010 | 1,645 | 159 | 41,600 |
| – Designated as at fair value through profit or loss | 259 | 126 | 1,004 | 442 | 1,245 | | 3,076 |
| Financial assets at fair value through other comprehensive income | | | | | | | |
| – Equity securities | | | | | | 2,306 | 2,306 |
| – Debt securities | 216 | 175 | 1,146 | 14,528 | 14,419 | | 30,483 |
| – Loans and advances | 26 | 36 | 202 | 627 | 788 | | 1,680 |
| Securities at amortised cost | 1,005 | 916 | 5,930 | 24,556 | 13,701 | | 46,108 |
| Loans and advances to customers | 55,138 | 18,586 | 45,871 | 184,708 | 307,462 | | 611,765 |
| Intangible assets | | | 127 | 506 | | 1,283 | 1,916 |
| Other assets [2] | 4,618 | 369 | 1,049 | 665 | 1,251 | 46 | 7,999 |
| Remaining assets (for which maturities are not applicable) [3] | | | | | | 4,962 | 4,962 |
| Total assets | **172,793** | **43,842** | **71,460** | **240,008** | **354,885** | **8,756** | **891,744** |
| **2018** | | | | | | | |
| Cash and balances with central banks | 49,987 | | | | | | 49,987 |
| Loans and advances to banks | 15,864 | 3,693 | 4,830 | 5,599 | 437 | | 30,422 |
| Financial assets at fair value through profit or loss | | | | | | | |
| – Trading assets | 15,815 | 6,032 | 8,123 | 9,276 | 10,906 | | 50,152 |
| – Non-trading derivatives | 274 | 323 | 173 | 1,059 | 835 | | 2,664 |
| – Mandatorily at fair value through profit or loss | 48,240 | 9,047 | 5,325 | 1,238 | 723 | 210 | 64,783 |
| – Designated as at fair value through profit or loss | 265 | 208 | 784 | 635 | 994 | | 2,887 |
| Financial assets at fair value through other comprehensive income | | | | | | | |
| – Equity securities | | | | | | 3,228 | 3,228 |
| – Debt securities | 272 | 234 | 1,597 | 13,409 | 10,103 | | 25,616 |
| – Loans and advances | 42 | 97 | 254 | 1,023 | 962 | | 2,379 |
| Securities at amortised cost | 1,126 | 2,537 | 2,737 | 22,169 | 18,708 | | 47,276 |
| Loans and advances to customers | 55,736 | 17,689 | 39,443 | 177,298 | 302,031 | | 592,196 |
| Intangible assets | | | 120 | 481 | | 1,238 | 1,839 |
| Other assets [2] | 6,895 | 165 | 2,437 | 598 | 429 | 214 | 10,738 |
| Remaining assets (for which maturities are not applicable) [3] | | | | | | 2,861 | 2,861 |
| Total assets | **194,517** | **40,024** | **65,823** | **232,785** | **346,129** | **7,751** | **887,030** |

1 Includes assets on demand.

2 Includes Other assets, Assets held for sale, and Current and Deferred tax assets as presented in the Consolidated statement of financial position.

3 Included in remaining assets for which maturities are not applicable are property and equipment, and investments in associates and joint ventures. Due to their nature remaining assets consist mainly of assets expected to be recovered after more than 12 months

## 41 Liabilities by maturity

The tables below include all financial liabilities by maturity based on contractual, undiscounted cash flows. Perpetual liabilities are included in column 'Maturity not applicable'. Furthermore, the undiscounted future coupon interest on financial liabilities payable is included in a separate line and in the relevant maturity bucket. Derivative liabilities are included on a net basis if cash flows are settled net. For other derivative liabilities the contractual gross cash flow payable is included.

Non-financial liabilities are included based on a breakdown of the amounts per the statement of financial position, by expected maturity. Reference is made to the liquidity risk paragraph in 'Risk Management – Funding and liquidity risk' for a description on how liquidity risk is managed.

## Liabilities by maturity

| 2019 | Less than 1 month [1] | 1-3 months | 3-12 months | 1-5 years | Over 5 years | Maturity not applicable | Adjustment [2] | Total |
|---|---|---|---|---|---|---|---|---|
| Deposits from banks | 9,903 | 847 | 12,011 | 10,280 | 1,965 | | –180 | 34,826 |
| Customer deposits | 540,544 | 13,892 | 13,784 | 3,724 | 2,381 | | 108 | 574,433 |
| Financial liabilities at fair value through profit or loss | | | | | | | | |
| – Other trading liabilities | 4,666 | 646 | 436 | 568 | 333 | | 68 | 6,717 |
| – Trading derivatives | 1,589 | 1,492 | 3,312 | 7,771 | 7,011 | | 151 | 21,325 |
| – Non-trading derivatives | 379 | 91 | 152 | 616 | 440 | | 539 | 2,215 |
| – Designated at fair value through profit or loss | 27,048 | 10,467 | 1,885 | 2,938 | 5,089 | 7 | 251 | 47,684 |
| Debt securities in issue | 2,616 | 13,278 | 35,915 | 36,895 | 26,592 | | 3,231 | 118,528 |
| Subordinated loans | | | | 1,780 | 7,455 | 6,941 | 411 | 16,588 |
| Lease liabilities | 16 | 39 | 161 | 668 | 643 | | –21 | 1,507 |
| Financial liabilities | **586,762** | **40,753** | **67,656** | **65,238** | **51,909** | **6,948** | **4,557** | **823,823** |
| Other liabilities[3] | 7,916 | 820 | 2,361 | 1,101 | 1,061 | | | 13,259 |
| Non-financial liabilities | **7,916** | **820** | **2,361** | **1,101** | **1,061** | | | **13,259** |
| Total liabilities | **594,677** | **41,573** | **70,017** | **66,339** | **52,970** | **6,948** | **4,557** | **837,082** |
| | | | | | | | | |
| Coupon interest due on financial liabilities | 574 | 692 | 1,482 | 5,790 | 4,355 | 379 | | 13,271 |
| **2018** | | | | | | | | |
| Deposits from banks | 10,506 | 1,068 | 1,940 | 21,571 | 2,242 | | 2 | 37,330 |
| Customer deposits | 515,177 | 17,354 | 16,086 | 4,695 | 2,500 | | | 555,812 |
| Financial liabilities at fair value through profit or loss | | | | | | | | |
| – Other trading liabilities | 4,075 | 1,318 | 1,465 | 888 | 1,655 | | 286 | 9,687 |
| – Trading derivatives | 1,711 | 1,873 | 3,680 | 6,855 | 6,035 | | 1,374 | 21,528 |
| – Non-trading derivatives | 458 | 312 | 252 | 988 | 866 | | –577 | 2,299 |
| – Designated at fair value through profit or loss | 34,914 | 11,753 | 4,115 | 3,519 | 4,921 | | –43 | 59,179 |
| Debt securities in issue | 4,066 | 20,961 | 30,282 | 41,068 | 21,413 | | 1,961 | 119,751 |
| Subordinated loans | | | 0 | 1,713 | 6,497 | 5,339 | 176 | 13,724 |
| Lease liabilities | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Financial liabilities | **570,907** | **54,639** | **57,820** | **81,297** | **46,129** | **5,339** | **3,180** | **819,310** |
| Other liabilities[3] | 10,560 | 899 | 2,496 | 1,198 | 831 | | | 15,983 |
| Non-financial liabilities | **10,560** | **899** | **2,496** | **1,198** | **831** | | | **15,983** |
| Total liabilities | **581,467** | **55,538** | **60,316** | **82,494** | **46,960** | **5,339** | **3,180** | **835,295** |
| | | | | | | | | |
| Coupon interest due on financial liabilities[4] | 842 | 659 | 1,719 | 5,626 | 3,839 | 287 | | 12,971 |

1 Includes liabilities on demand.
2 This column reconciles the contractual undiscounted cash flows on financial liabilities to the statement of financial position values. The adjustments mainly relate to the impact of discounting, and for derivatives, to the fact that the contractual cash flows are presented on a gross basis (unless the cash flows are actually settled net).
3 Includes Other liabilities, Current and Deferred tax liabilities, and Provisions as presented in the Consolidated statement of financial position.
4 Prior period amounts for coupon interest have been updated to improve consistency and comparability.

## 42 Assets not freely disposable

The assets not freely disposable consist primarily of Loans and advances to customers pledged to secure Debt securities in issue, deposits from the Dutch Central Bank and other banks. They serve to secure margin accounts and are used for other purposes required by law. The assets not freely disposable are as follows:

**Assets not freely disposable**

| | 2019 | 2018 |
|---|---|---|
| Banks | | |
| – Cash and balances with central banks | 1,382 | 1,471 |
| – Loans and advances to banks | 6,337 | 4,373 |
| Financial assets at fair value through profit or loss | 614 | 449 [1] |
| Financial assets at fair value through OCI | 240 | 253 [1] |
| Securities at amortised cost | 189 | 627 [1] |
| Loans and advances to customers | 75,755 | 74,352 |
| Other assets | 908 | 734 |
| | **85,425** | **82,258** |

1 The prior period amounts have been updated to improve consistency and comparability.

In addition, in some jurisdictions ING Bank N.V. has an obligation to maintain a reserve with central banks. As at 31 December 2019, the minimum mandatory reserve deposits with various central banks amount to EUR 9,975 million (2018: EUR 9,359 million).

Loans and advances to customers that have been pledged as collateral for Debt securities in issue and for liquidity purposes, amount in The Netherlands to EUR 45,530 million (2018: EUR 46,320 million), in Germany to EUR 13,222 million (2018: EUR 12,143 million), in Belgium EUR 11,298 million (2018: EUR 11,894 million), in Australia to EUR 4,150 million (2018: EUR 2,638 million) and in the United States to EUR 1,010 million (2018: EUR 1,183 million).
The table does not include assets relating to securities lending as well as sale and repurchase transactions. Reference is made to Note 43 'Transfer of financial assets'.

## 43 Transfer of financial assets

The majority of ING's financial assets that have been transferred, but do not qualify for derecognition are debt instruments used in securities lending or sale and repurchase transactions.

**Transfer of financial assets not qualifying for derecognition**

| | Securities lending | | | | Sale and repurchase | | | |
|---|---|---|---|---|---|---|---|---|
| | Equity | | Debt | | Equity | | Debt | |
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| **Transferred assets at carrying amount** | | | | | | | | |
| Financial assets at fair value through profit or loss | 2,542 | 2,962 | 1,974 | 1,170 | 1,682 | 2,396 | 9,538 | 7,134 [2] |
| Financial assets at fair value through other comprehensive income | | | 193 | 168 | | | 6 | 325 |
| Loans and advances to customers | | | | | | | | |
| Securities at amortised cost | | | 195 | 142 | | | 734 | 910 |
| | | | | | | | | |
| **Associated liabilities at carrying amount[1]** | | | | | | | | |
| Deposits from banks | n/a | n/a | n/a | n/a | | | | |
| Customer deposits | n/a | n/a | n/a | n/a | | | | |
| Financial liabilities at fair value through profit or loss | n/a | n/a | n/a | n/a | 1,619 | 2,373 | 3,805 | 2,225 |

1 The table includes the associated liabilities which are reported after offsetting, compared to the gross positions of the encumbered assets.
2 The prior period amount has been updated to improve consistency and comparability.

Included in the table above are the carrying amounts of transferred assets under repurchase agreements, and securities lending that do not qualify for derecognition.

The table above does not include assets transferred to consolidated securitisation entities as the related assets remain recognised in the consolidated statement of financial position.

## 44 Offsetting financial assets and liabilities

The following tables include information about rights to offset and the related arrangements. The amounts included consist of all recognised financial instruments that are presented net in the statement of financial position under the IFRS offsetting requirements (legal right to offset and intention to net settle) and amounts presented gross in the statement of financial position but subject to enforceable master netting arrangements or similar arrangement.

## Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

| 2019 | | Gross amounts of recognised financial assets | Gross amounts of recognised financial liabilities offset in the statement of financial position | Net amounts of financial assets presented in the statement of financial position | Related amounts not offset in the statement of financial position: Financial instruments | Related amounts not offset in the statement of financial position: Cash and financial instruments received as collateral | Net amount |
|---|---|---|---|---|---|---|---|
| **Statement of financial position line item** | **Financial instrument** | | | | | | |
| **Loans and advances to banks** | Reverse repurchase, securities borrowing and similar agreements | 868 | | 868 | 21 | 738 | 109 |
| | | **868** | | **868** | **21** | **738** | **109** |
| **Financial assets at fair value through profit or loss** | | | | | | | |
| Trading assets | Derivatives | 19,766 | –3,851 | 15,914 | 13,725 | 3 | 2,186 |
| Trading and Non-trading | Reverse repurchase, securities borrowing and similar agreements | 57,328 | –20,545 | 36,783 | 50 | 36,553 | 181 |
| | | **77,094** | **–24,396** | **52,698** | **13,774** | **36,556** | **2,368** |
| **Non-trading derivatives** | Derivatives | 54,689 | –53,321 | 1,368 | 1,167 | | 201 |
| | | **54,689** | **–53,321** | **1,368** | **1,167** | | **201** |
| **Loans and advances to customers** | Debit balances on customer accounts | 169,313 | –166,624 | 2,689 | 1,422 | 813 | 454 |
| | | **169,313** | **–166,624** | **2,689** | **1,422** | **813** | **454** |
| **Other items where offsetting is applied in the statement of financial position** | | **9,787** | **–9,423** | **364** | **15** | | **349** |
| Impact of enforceable master netting arrangements or similar arrangements[1] | Derivatives | | | | –4,380 | 3,965 | 415 |
| | Other | | | | –3 | | 3 |
| | | | | | **–4,383** | **3,965** | **418** |
| **Total financial assets** | | **311,750** | **–253,764** | **57,986** | **12,016** | **42,072** | **3,898** |

1 The line 'Impact of enforceable master netting agreements or similar arrangements' contains derivative positions under the same master netting arrangements being presented in different statement of financial position line items.

## Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

| 2018 | | Gross amounts of recognised financial assets | Gross amounts of recognised financial liabilities offset in the statement of financial position | Net amounts of financial assets presented in the statement of financial position | Related amounts not offset in the statement of financial position: Financial instruments | Related amounts not offset in the statement of financial position: Cash and financial instruments received as collateral | Net amount |
|---|---|---|---|---|---|---|---|
| **Statement of financial position line item** | **Financial instrument** | | | | | | |
| **Loans and advances to banks** | Reverse repurchase, securities borrowing and similar agreements | 1,947 | | 1,947 | | 1,838 | 109 |
| | | **1,947** | | **1,947** | | **1,838** | **109** |
| **Financial assets at fair value through profit or loss** | | | | | | | |
| Trading assets | Derivatives | 17,181 | –1,012 | 16,168 | 14,664 | 2 | 1,502 |
| Trading and Non-trading | Reverse repurchase, securities borrowing and similar agreements | 76,983 | –18,337 | 58,647 | 1,102 | 57,304 | 240 |
| | | **94,164** | **–19,349** | **74,815** | **15,766** | **57,307** | **1,742** |
| **Non-trading derivatives** | Derivatives | 41,263 | –39,648 | 1,615 | 1,520 | | 96 |
| **Loans and advances to customers** | Reverse repurchase, securities borrowing and similar agreements | 223 | –223 | | | | |
| | Debit balances on customer accounts | 161,730 | –159,596 | 2,134 | 1,166 | 605 | 363 |
| | | **161,953** | **–159,819** | **2,134** | **1,166** | **605** | **363** |
| **Other items where offsetting is applied in the statement of financial position** | | **5,705** | **–5,193** | **512** | **1** | | **510** |
| Impact of enforceable master netting arrangements or similar arrangements[1] | Derivatives | | | | –5,041 | 3,518 | 1,523 |
| | Other | | | | | | |
| | | | | | **–5,041** | **3,518** | **1,523** |
| **Total financial assets** | | **305,032** | **–224,008** | **81,023** | **13,412** | **63,267** | **4,344** |

1 The line 'Impact of enforceable master netting agreements or similar arrangements' contains derivative positions under the same master netting arrangements being presented in different statement of financial position line items.

## Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

| 2019 | | Gross amounts of recognised financial liabilities | Gross amounts of recognised financial assets offset in the statement of financial position | Net amounts of financial liabilities presented in the statement of financial position | Related amounts not offset in the statement of financial position | | |
|---|---|---|---|---|---|---|---|
| | | | | | Financial instruments | Cash and financial instruments pledged as collateral | Net amount |
| **Statement of financial position line item** | **Financial instrument** | | | | | | |
| **Deposits from banks** | Repurchase, securities lending and similar agreements | 26 | | 26 | 26 | 21 | –21 |
| | | **26** | | **26** | **26** | **21** | **–21** |
| **Customer deposits** | Repurchase, securities lending and similar agreements | | | | | | |
| | Corporate deposits | 5,783 | –5,432 | 351 | | | 351 |
| | Credit balances on customer accounts | 175,490 | –161,193 | 14,297 | 1,419 | – | 12,878 |
| | | **181,273** | **–166,624** | **14,649** | **1,419** | **–** | **13,230** |
| **Financial liabilities at fair value through profit or loss** | | | | | | | |
| Trading liabilities | Derivatives | 20,935 | –3,842 | 17,093 | 16,073 | 6 | 1,014 |
| Trading and Non-trading | Repurchase, securities lending and similar agreements | 56,818 | –20,545 | 36,273 | 50 | 35,787 | 436 |
| | | **77,752** | **–24,386** | **53,366** | **16,123** | **35,793** | **1,450** |
| Non-trading derivatives | Derivatives | **55,194** | **–53,823** | **1,371** | **1,177** | **191** | **3** |
| Other items where offsetting is applied in the statement of financial position | | **9,200** | **–8,930** | **269** | **11** | | **258** |
| Impact of enforceable master netting arrangements or similar arrangements[1] | Derivatives | | | | –6,731 | 7,620 | –889 |
| | Other | | | | –8 | | 8 |
| | | **–** | **–** | **–** | **–6,739** | **7,620** | **–881** |
| **Total financial liabilities** | | **323,445** | **–253,764** | **69,681** | **12,016** | **43,625** | **14,040** |

1 The line 'Impact of enforceable master netting agreements or similar arrangements' contains derivative positions under the same master netting arrangements being presented in different statement of financial position line items.

## Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

| 2018 | | Gross amounts of recognised financial liabilities | Gross amounts of recognised financial assets offset in the statement of financial position | Net amounts of financial liabilities presented in the statement of financial position | Related amounts not offset in the statement of financial position | | |
|---|---|---|---|---|---|---|---|
| | | | | | Financial instruments | Cash and financial instruments pledged as collateral | Net amount |
| **Statement of financial position line item** | **Financial instrument** | | | | | | |
| **Deposits from banks** | Repurchase, securities lending and similar agreements | 36 | –36 | –0 | | | –0 |
| | Other | 0 | | 0 | 0 | | 0 |
| | | **37** | **–36** | **0** | **0** | **0** | **–0** |
| **Customer deposits** | Repurchase, securities lending and similar agreements | 224 | –186 | 37 | | 37 | 0 |
| | Corporate deposits | 9,567 | –9,078 | 489 | | | 489 |
| | Credit balances on customer accounts | 161,552 | –150,518 | 11,034 | 1,166 | 4 | 9,864 |
| | | **171,343** | **–159,782** | **11,561** | **1,166** | **42** | **10,353** |
| **Financial liabilities at fair value through profit or loss** | | | | | | | |
| Trading liabilities | Derivatives | 17,105 | –1,021 | 16,084 | 15,301 | 2 | 781 |
| Trading and Non-trading | Repurchase, securities lending and similar agreements | 64,324 | –18,337 | 45,987 | 1,102 | 44,801 | 85 |
| | | **81,429** | **–19,357** | **62,071** | **16,403** | **44,803** | **866** |
| Non-trading derivatives | Derivatives | **42,675** | **–41,198** | **1,477** | **1,312** | **178** | **–13** |
| Other items where offsetting is applied in the statement of financial position | | **4,353** | **–3,634** | **718** | **–4** | | **723** |
| Impact of enforceable master netting arrangements or similar arrangements[1] | Derivatives | | | | -5,464 | 5,773 | -309 |
| | | | | | **–5,464** | **5,773** | **–309** |
| **Total financial liabilities** | | **299,836** | **–224,008** | **75,827** | **13,412** | **50,796** | **11,619** |

1 The line 'Impact of enforceable master netting agreements or similar arrangements' contains derivative positions under the same master netting arrangements being presented in different statement of financial position line items.

## 45 Contingent liabilities and commitments

In the normal course of business, ING Group is party to activities where risks are not reflected in whole or in part in the consolidated financial statements. In response to the needs of its customers, the Group offers financial products related to loans. These products include traditional off-balance sheet credit-related financial instruments.

**Contingent liabilities and commitments**

| | Less than 1 month | | 1–3 months | | 3–12 months | | 1–5 years | | Over 5 years | | Maturity not applicable | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 | 2019 | 2018[2] | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 | 2018[2] |
| Contingent liabilities in respect of | | | | | | | | | | | | | | |
| – Guarantees [1] | 11,441 | 12,644 | 1,187 | 891 | 3,373 | 3,475 | 6,355 | 3,536 | 5,146 | 5,710 | | | 27,502 | 26,256 |
| – Irrevocable letters of credit | 9,770 | 10,346 | 4,987 | 4,499 | 1,259 | 998 | 322 | 374 | 3 | 3 | | | 16,340 | 16,220 |
| – Other | 57 | 53 | | | | | 75 | 115 | | – | | | 131 | 168 |
| | **21,268** | **23,043** | **6,174** | **5,389** | **4,631** | **4,473** | **6,752** | **4,026** | **5,149** | **5,713** | **–** | **–** | **43,974** | **42,644** |
| | | | | | | | | | | | | | | |
| Guarantees issued by ING Groep N.V. | | | | | | | | | 319 | 364 | | | 319 | 364 |
| | | | | | | | | | | | | | | |
| Irrevocable facilities | 64,036 | 63,499 | 2,289 | 2,699 | 16,766 | 13,731 | 30,152 | 32,717 | 6,760 | 6,876 | | | 120,002 | 119,522 |
| | **85,304** | **86,541** | **8,462** | **8,088** | **21,397** | **18,204** | **36,905** | **36,743** | **12,228** | **12,954** | **–** | **–** | **164,296** | **162,530** |

1 The prior period has been updated to improve consistency and comparability of the amounts per maturity of guarantees.
2 ING in the Netherlands offers credit facilities to clients, linked to ING current accounts. After a review of the product conditions in 2019, it has been concluded that these facilities are irrevocable and therefore reported as such above. The prior period has been updated to improve consistency and comparability.

Guarantees relate both to credit and non-credit substitute guarantees. Credit substitute guarantees are guarantees given by ING Group in respect of credit granted to customers by a third party. Many of them are expected to expire without being drawn on and therefore do not necessarily represent future cash outflows. In addition to the items included in contingent liabilities, ING Group has issued guarantees as a participant in collective arrangements of national industry bodies and as a participant in government required collective guarantee schemes which apply in different countries.

Irrevocable letters of credit mainly secure payments to third parties for a customer's foreign and domestic trade transactions in order to finance a shipment of goods. ING Group's credit risk in these transactions is limited since these transactions are collateralised by the commodity shipped and are of a short duration.

Other contingent liabilities include acceptances of bills and are of a short-term nature. Other contingent liabilities also include contingent liabilities resulting from the operations of the Real Estate business including obligations under development and construction contracts. Furthermore other contingent liabilities include a contingent liability in connection with a possible Dutch tax obligation that relates to the deduction from Dutch taxable profit for losses incurred by ING Bank in the United Kingdom in previous years. The existence of this obligation will be confirmed only by the occurrence of future profits in the United Kingdom.

Reference is made to Parent company financial statements – Notes to the parent company financial statements, Note 12 'Other' for further information on Guarantees issued by ING Groep N.V.

Irrevocable facilities mainly constitute unused portions of irrevocable credit facilities granted to corporate clients. Many of these facilities are for a fixed duration and bear interest at a floating rate. ING Group's credit risk and interest rate risk in these transactions is limited. The unused portion of irrevocable credit facilities is partly secured by customers' assets or counter-guarantees by the central governments and exempted bodies under the regulatory requirements. Irrevocable facilities also include commitments made to purchase securities to be issued by governments and private issuers.

## 46 Legal proceedings

ING Group and its consolidated subsidiaries are involved in governmental, regulatory, arbitration and legal proceedings and investigations in the Netherlands and in a number of foreign jurisdictions, including the U.S., involving claims by and against them which arise in the ordinary course of their businesses, including in connection with their activities as lenders, broker-dealers, underwriters, issuers of securities and investors and their position as employers and taxpayers. In certain of such proceedings, very large or indeterminate amounts are sought, including punitive and other damages. While it is not feasible to predict or determine the ultimate outcome of all pending or threatened governmental, regulatory, arbitration and legal proceedings and investigations, ING is of the opinion that some of the proceedings and investigations set out below may have or have in the recent past had a significant effect on the financial position, profitability or reputation of ING and/or ING and its consolidated subsidiaries.

**Settlement Agreement:** On 4 September 2018, ING announced that it had entered into a settlement agreement with the Dutch Public Prosecution Service relating to previously disclosed investigations regarding various requirements for client on-boarding and the prevention of money laundering and corrupt practices. Under the terms of the settlement agreement ING paid a fine of €675 million and €100 million for disgorgement. In connection with the investigations, ING had also received information requests from the US Securities and Exchange Commission (SEC). As ING announced on 5 September 2018, ING has received a formal notification from the SEC that it has concluded its investigation. In the letter dated 4 September 2018 the Division of Enforcement states that, based on information as of the date thereof, it does not intend to recommend an SEC enforcement action against ING. Following the entry into the settlement agreement, ING has experienced heightened scrutiny from authorities in various countries. ING is also aware, including as a result of media reports, that other parties may, among other things, seek to commence legal proceedings against ING in connection with the subject matter of the settlement, have filed or may file requests to reconsider the prosecutor's decision to enter into the settlement agreement with ING and not to prosecute ING or (former) ING employees in court, or have filed or may file requests for disciplinary proceedings against ING employees based on the Dutch Banker's oath.

**Findings regarding AML processes:** As previously disclosed, after its September 2018 settlement with Dutch authorities concerning Anti-Money Laundering matters, and in the context of significantly increased attention on the prevention of financial economic crime, ING has experienced heightened scrutiny by authorities in various countries. The interactions with such regulatory and judicial authorities have included, and can be expected to continue to include, onsite visits, information requests, investigations and other enquiries. Such interactions, as well as ING's internal assessments in connection with its global enhancement programme, have in some cases resulted in satisfactory outcomes, and also have resulted in, and may continue to result in, findings, or other conclusions which may require appropriate remedial actions by ING, or may have other consequences. ING intends to continue to work in close cooperation with authorities as it seeks to improve its management of non-financial risks in terms of policies, tooling, monitoring, governance, knowledge and behaviour.

Also as previously disclosed in March 2019, ING Italy was informed by the Banca d'Italia of their report containing their conclusions regarding shortcomings in AML processes at ING Italy, which was prepared based on an inspection conducted from October 2018 until January 2019. ING Italy has been engaged in discussions with Banca d'Italia and Italian judiciary authorities. In February 2020 the Italian court confirmed and approved a plea bargain agreement with the Italian judiciary authorities. As a consequence, ING Italy has paid an administrative fine and disgorgement of profit. In addition, in February 2020 the Banca d'Italia imposed an administrative fine on ING Italy. Both amounts were already provisioned for in 2019.

In line with the enhancement programme announced in 2018, ING Italy is taking steps intended to improve processes and management of compliance risks as required by the Banca d'Italia. In consultation and in agreement with the Banca d'Italia, ING Italy has agreed that it will refrain from taking on new customers during further discussions on the enhancement plans with the Banca d'Italia. ING Italy will continue to fully serve existing clients in Italy and is working hard to address the shortcomings and resolve the issues identified.
ING announced steps in September 2018 to enhance its management of compliance risks and embed stronger awareness across the whole organisation. This programme started in 2017 and includes enhancing KYC files and working on various structural improvements in compliance policies, tooling, monitoring, governance, knowledge and behaviour.

**Tax cases:** Because of the geographic spread of its business, ING may be subject to tax audits, investigations and procedures in numerous jurisdictions at any point in time. Although ING believes that it has adequately provided for all its tax positions, the ultimate resolution of these audits, investigations and procedures may result in liabilities which are different from the amounts recognised. ING has also identified issues in connection with its U.S. tax information reporting and withholding obligations in respect of prior periods. ING has agreed with the US Internal Revenue Service ('IRS') to resolve these issues by paying the tax owed. ING has made the payment out of the provision it had already recognised.

**Litigation regarding products of a former subsidiary in Mexico:** Proceedings in which ING is involved include complaints and lawsuits concerning the performance of certain interest sensitive products that were sold by a former subsidiary of ING in Mexico. A provision has been taken in the past.

**SIBOR – SOR litigation**: In July 2016, investors in derivatives tied to the Singapore Interbank Offer Rate ('SIBOR') filed a U.S. class action complaint in the New York District Court alleging that several banks, including ING, conspired to rig the prices of derivatives tied to SIBOR and the Singapore Swap Offer Rate ('SOR'). The lawsuit refers to investigations by the Monetary Authority of Singapore ('MAS') and other regulators, including the U.S. Commodity Futures Trading Commission ('CFTC'), in relation to rigging prices of SIBOR- and SOR based derivatives. In October 2018, the New York District Court issued a decision dismissing all claims against ING Group and ING Capital Markets LLC, but leaving ING Bank, together with several other banks, in the case, and directing plaintiffs to file an amended complaint consistent with the Court's rulings. In October 2018, plaintiffs filed such amended complaint, which asserts claims against a number of defendants but none against ING Bank (or any other ING entity), effectively dismissing ING Bank from the case. In December 2018, plaintiffs sought permission from the Court to file a further amended complaint that names ING Bank as a defendant. In July 2019, the New York District Court granted the defendants' motion to dismiss and denied leave to further amend the complaint, effectively dismissing all remaining claims against ING Bank. In November 2019, plaintiffs filed an appeal against this judgment.

**Claims regarding accounts with predecessors of ING Bank Turkey:** ING Bank Turkey has received numerous claims from (former) customers of legal predecessors of ING Bank Turkey. The claims are based on offshore accounts held with these banks, which banks were seized by the Savings Deposit Insurance Fund (SDIF) prior to the acquisition of ING Bank Turkey in 2007 from OYAK. SDIF has also filed various lawsuits against ING Bank Turkey to claim compensation from ING Bank Turkey, with respect to amounts paid out to offshore account holders so far. At this moment it is not possible to assess the outcome of these procedures nor to provide an estimate of the (potential) financial effect of these claims.

**Interest rate derivatives claims:** ING is involved in several legal proceedings in the Netherlands with respect to interest rate derivatives that were sold to clients in connection with floating interest rate loans in order to hedge the interest rate risk of the loans. These proceedings are based on several legal grounds, depending on the facts and circumstances of each specific case, inter alia alleged breach of duty of care, insufficient information provided to the clients on the product and its risks and other elements related to the interest rate derivatives that were sold to clients. In some cases, the court has ruled in favour of the claimants and awarded damages, annulled the interest rate derivative or ordered repayment of certain amounts to the claimants. The total amounts that need to be repaid or compensated in some cases still need to be determined. ING may decide to appeal against adverse rulings. Although the outcome of the pending litigation and similar cases that may be brought in the future is uncertain, it is possible that the courts may ultimately rule in favour of the claimants in some or all of such cases. Where appropriate a provision has been taken. The aggregate financial impact of the current and future litigation could become material.
As requested by the AFM, ING has reviewed a significant part of the files of clients who bought interest rate derivatives. In December 2015, the AFM concluded that Dutch banks may have to re-assess certain client files, potentially including certain derivative contracts that were terminated prior to April 2014 or other client files. As advised by the AFM, the Minister of Finance appointed a Committee of independent experts (the 'Committee') which has established a uniform recovery framework for Dutch SME clients with interest rate derivatives. ING has adopted this recovery framework and has reassessed individual files against this framework. ING has taken an additional provision for the financial consequences of the recovery framework. In 2017, ING has informed the majority of the relevant clients whether they are in scope of the recovery framework, and thus eligible for compensation, or not. Because implementation by ING of the uniform recovery framework encountered delay, ING has previously offered advance payments to customers out of the existing provision. As of December 2018, all customers in scope of the uniform recovery framework have received an offer of compensation from ING (including offers of no compensation). As of 1 July 2019, the required process under the uniform recovery framework had been completed for approximately 99% of all customers in scope.

ING is awaiting feedback from the independent dispute committee on one file for which the relevant client opted for a 'binding advice' procedure. Hearings with the independent dispute committee took place in November and December 2019. It is not clear when the committee will present its verdict.

**Interest surcharges claims:** ING received complaints and was involved in litigation with natural persons (natuurlijke personen) in the Netherlands regarding increases in interest surcharges with respect to several credit products, including but not limited to commercial property (commercieel verhuurd onroerend goed). ING has reviewed the relevant product portfolio. The provision previously taken has been reversed for certain of these complaints. All claims are dealt with individually. Thus far, the courts have ruled in favour of ING in each case, ruling that ING was allowed to increase the interest surcharged based upon the essential obligations in the contract.

**Criminal proceedings regarding cash company financing:** In June 2017, a Belgian criminal Court ruled that ING Luxembourg assisted third parties in 2000 to commit a tax fraud in the context of the purchase of the shares of a cash company. The Court convicted ING Luxembourg, among others, and ordered ING to pay a penal fine of EUR 120,000 (suspended for half of the total amount). The court also ordered ING Luxembourg jointly and severally with other parties, to pay EUR 31.48 million (together with any interest payable under applicable law) to the bankruptcy trustee of the cash company. In July 2017, ING Luxembourg filed an appeal against this judgment. A settlement with all the civil parties involved was reached in mid-2018. However, this settlement does not apply to the criminal conviction of ING Luxembourg. In January 2020, the Court of Appeal of Antwerp reformed the first judgment: ING Luxemburg benefitted from an 'opschorting van de uitspraak/suspension du prononcé' which means that the conviction has been upheld, but no penal sanction has been pronounced (penalties suspended). ING Luxembourg is analyzing the judgement.

**Mortgage expenses claims:** ING Spain has received claims and is involved in procedures with customers regarding reimbursement of expenses associated with the formalisation of mortgages. In most court proceedings in first instance the expense clause of the relevant mortgage contract has been declared null and ING Spain has been ordered to reimburse all or part of the applicable expenses. The courts in first instance have applied in their rulings different criteria regarding the reimbursement of expenses. ING Spain has filed an appeal against a number of these court decisions. ING Spain has also been included, together with other Spanish banks, in two class actions filed by customer associations. The outcome of the pending litigation and similar cases that may be brought in the future is uncertain. A provision has been taken. However, the aggregate financial impact of the current and future litigation could change. In February 2018, the Spanish Supreme Court ruled that Stamp Duty (Impuesto de Actos Jurídicos Documentados) expenses are chargeable to the customer, while in October 2018 it ruled that Stamp Duty is chargeable to the banks. In November 2018, the Spanish Supreme Court clarified the issue regarding Stamp Duty by stating that this tax should be borne by the customer. As for the remaining types of the expenses, in January 2019, the Spanish Supreme Court issued several decisions that stated that the client and the bank each have to bear half of the notary and management company costs and that registry costs have to be borne in full by the bank. Allocation of valuation costs between the bank and the customer were not addressed by the Spanish Supreme Court decisions and remain uncertain.

**Imtech claim:** In January 2018, ING Bank received a claim from Stichting ImtechClaim.nl and Imtech Shareholders Action Group B.V. on behalf of certain (former) shareholders of Imtech N.V. ('Imtech'). Furthermore, on 28 March 2018, ING Bank received another claim on the same subject matter from the Dutch Association of Stockholders (Vereniging van Effectenbezitters, "VEB"). Each of the claimants allege inter alia that shareholders were misled by the prospectus of the rights issues of Imtech in July 2013 and October 2014. ING Bank, being one of the underwriters of the rights issues, is held liable by the claimants for the damages that investors in Imtech would have suffered. ING Bank responded to the claimants denying any and all responsibility in relation to the allegations made in the relevant letters. In September 2018, the trustees in the bankruptcy of Imtech claimed from various financing parties, including ING, payment of what the security agent has collected following bankruptcy or intends to collect, repayment of all that was repaid to the financing parties, as well as compensation for the repayment of the bridge financing. At this moment it is not possible to assess the outcome of these claims nor to provide an estimate of the (potential) effect of these claims.

**Mexican Government Bond litigation:** A class action complaint was filed adding ING Bank N.V., ING Groep N.V., ING Bank Mexico S.A. and ING Financial Markets LLC ('ING') as defendants to a complaint that had previously been filed against multiple other financial institutions. The complaint alleges that the defendants conspired to fix the prices of Mexican Government Bonds. ING is defending itself against the allegations. Currently, it is not possible to provide an estimate of the (potential) financial effect of this claim. On 30 September 2019, the relevant court dismissed the antitrust complaint, finding that the plaintiffs had failed to identify any facts that links each defendant to the alleged conspiracy. On 9 December 2019, the plaintiffs filed an amended complaint removing all ING entities as defendants on the condition that the ING entities enter into a tolling agreement for the duration of two years. The relevant ING entities subsequently entered into a tolling agreement, which provides that the statute of limitations will not be tolled for the two year duration of the agreement. Should the plaintiffs discover any evidence of potential involvement by ING in the activities alleged in the complaint, ING could be brought back into the litigation.

## 47 Consolidated companies and businesses acquired and divested

### Acquisitions

In May 2019 ING acquired 80% of the shares of Intersoftware Group B.V., Findata Access B.V. and Unitrust B.V. (ISW Group) for a total consideration of EUR 18 million. The acquisition of ISW Group resulted in the recognition of goodwill of EUR 17 million.

In 2018 ING Bank obtained control over Payvision Holding B.V. (Payvision) by acquiring 75% of its shares. The share purchase agreement included a put option exercisable by the original shareholders and a call option exercisable by ING for the remaining 25% shares. The put and call option led to the recognition of a financial liability with initial recognition through shareholders' equity of EUR 87 million. In November 2019 ING Bank agreed to purchase the remaining 25% shares in three tranches between November 2019 and April 2020 for a total consideration of EUR 90 million. This resulted in the remeasurement of the financial liability to EUR 90 million. A stake of 23% was purchased in 2019 which reduced the outstanding financial liability. As at 31 December 2019 the ownership interest of ING Bank was 98% with an outstanding financial liability of EUR 7 million to acquire the remaining shares. Given that ING Bank already had control over Payvision, the acquisition of the shares in 2019 represents a shareholder transaction and resulted in a transfer between Non-controlling interest and Shareholders equity of EUR 24 million.

The purchase price of Payvision in 2018 included contingent consideration in the form of future milestone payments. A total of EUR 16 million was paid in 2019.

**Divestments**

In July 2019 ING completed the sale of part of the ING Lease Italy business. The settlement price amounted to EUR 1.162 million, consisted of a EUR 368 million cash settlement, a EUR 20 million Deferred Purchase Price and a EUR 774 million Senior Loan facility for the portfolio of lease receivables. The deferred purchase price is linked to the performance of the sold portfolio and is reported under the financial assets mandatorily measured at fair value through profit and loss. The additional loss in 2019 amounted EUR -2 million (2018: EUR -123 million). The Italian lease business was reported as Assets Held for Sale as at 31 December 2018 and previously included in the business line segment Wholesale Banking and geographical segment Other Challengers.

Reference is made to Note 12 ‘Assets and liabilities held for sale’ and Note 25 ‘Result on the disposal of group companies’.

## 48 Principal subsidiaries, investments in associates and joint ventures

For the majority of ING’s principal subsidiaries, ING Groep N.V. has control because it either directly or indirectly owns more than half of the voting power. For subsidiaries in which the interest held is below 50%, control exists based on the combination of ING’s financial interest and its rights from other contractual arrangements which result in control over the operating and financial policies of the entity.

For each of the subsidiaries listed, the voting rights held equal the proportion of ownership interest and consolidation by ING is based on the majority of ownership.

For the principal investments in associates and joint ventures ING Group has significant influence but not control. Significant influence generally results from a shareholding of between 20% and 50% of the voting rights, but also the ability to participate in the financial and operating policies through situations including, but not limited to one or more of the following:
- Representation on the board of directors;
- Participation in the policymaking process; and
- Interchange of managerial personnel.

The principal subsidiaries, investments in associates and joint ventures of ING Groep N.V. and their statutory place of incorporation or primary place of business are as follows:

**Principal subsidiaries, investments in associates and joint ventures**

| | | | Proportion of ownership and interest held by the group | |
|---|---|---|---|---|
| | | | 2019 | 2018 |
| **Subsidiary** | **Statutory place of Incorporation** | **Country of operation** | | |
| ING Bank N.V. | Amsterdam | the Netherlands | 100% | 100% |
| Bank Mendes Gans N.V. | Amsterdam | the Netherlands | 100% | 100% |
| ING Belgium S.A./N.V. | Brussels | Belgium | 100% | 100% |
| ING Luxembourg S.A. | Luxembourg City | Luxembourg | 100% | 100% |
| ING-DiBa AG | Frankfurt am Main | Germany | 100% | 100% |
| ING Bank Slaski S.A.[1] | Katowice | Poland | 75% | 75% |
| ING Financial Holdings | Delaware | United States of | 100% | 100% |
| ING Bank A.S. | Istanbul | Turkey | 100% | 100% |
| ING Bank (Australia) Ltd | Sydney | Australia | 100% | 100% |
| ING Commercial Finance B.V. | Amsterdam | the Netherlands | 100% | 100% |
| ING Groenbank N.V. | Amsterdam | the Netherlands | 100% | 100% |
| | | | | |
| **Investments in associates and joint ventures** | | | | |
| TMB Bank Public Company Ltd[2] | Bangkok | Thailand | 23% | 30% |

1 The shares of the non-controlling interest stake of 25% are listed on the Warsaw Stock Exchange, for summarised financial information we refer to Note 35 'Information on geographical areas.
2 Reference is made to Note 8 Investments in Associates and Joint Ventures.

## 49 Structured entities

ING Group's activities involve transactions with various structured entities (SE) in the normal course of its business. A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. ING Group's involvement in these entities varies and includes both debt financing and equity financing of these entities as well as other relationships. Based on its accounting policies, as disclosed in the section Principles of valuation and determination of results

of these financial statements, ING establishes whether these involvements result in no significant influence, significant influence, joint control or control over the structured entity.

The structured entities over which ING can exercise control are consolidated. ING may provide support to these consolidated structured entities as and when appropriate. However, this is fully reflected in the consolidated financial statements of ING Group as all assets and liabilities of these entities are included and off-balance sheet commitments are disclosed.

ING's activities involving structured entities are explained below in the following categories:
1 Consolidated ING originated securitisation programmes;
2 Consolidated ING originated Covered bond programme (CBC);
3 Consolidated ING sponsored Securitisation programme (Mont Blanc);
4 Unconsolidated Securitisation programme; and
5 Other structured entities.

### 1. Consolidated ING originated securitisation programmes

ING Group enters into liquidity management securitisation programmes in order to obtain funding and improve liquidity. Within the programme ING Group sells ING originated assets to a structured entity. The underlying exposures include residential mortgages in the Netherlands, Belgium, Spain, Italy and Australia and SME Loans in Belgium.

The structured entity issues securitised notes (traditional securitisations) which are eligible collateral for central bank liquidity purposes. In most programmes ING Group acts as investor of the securitised notes. ING Group continues to consolidate these structured entities if it is deemed to control the entities.

The structured entity issues securitisation notes in two or more tranches, of which the senior tranche obtains a high rating (AAA or AA) by a rating agency. The tranche can subsequently be used by ING Group as collateral in the money market for secured borrowings.

ING Group originated various securitisations, as at 31 December 2019 these consisted of approximately EUR 57 billion (2018: EUR 66 billion) of senior and subordinated notes, of which approximately EUR 4 billion (2018: EUR 5 billion) were issued externally. The underlying exposures are residential mortgages and SME loans. Apart from the third party funding, these securitisations did not impact ING Group's Consolidated statement of financial position and profit or loss.

In 2019, there are no non-controlling interests as part of the securitisation structured entities that are significant to ING Group. ING Group for the majority of the securitisation vehicles provides the funding for the entity except for EUR 4 billion (2018: EUR 5 billion).

In addition ING Group originated various securitisations for liquidity management optimisation purposes. As at 31 December 2019, these consisted of approximately EUR 2 billion (2018: EUR 4 billion) of senior secured portfolio loans, which have been issued to ING subsidiaries in Germany. The underlying exposures are senior loans to large corporations and financial institutions, and real estate finance loans, mainly in the Netherlands. These securitisations did not impact ING Group's consolidated statement of financial position and profit or loss.

## 2. Consolidated ING originated Covered bond programme (CBC)

ING Group has entered into a covered bond programme. Under the covered bond programme ING issues bonds. The payment of interest and principal is guaranteed by the ING administered structured entities, ING Covered Bond Company B.V., and ING SB Covered Bond Company B.V. In order for these entities to fulfil their guarantee, ING legally transfers mainly Dutch mortgage loans originated by ING. Furthermore ING offers protection against deterioration of the mortgage loans. The entities are consolidated by ING Group.

**Covered bond programme**

| | Fair value pledged mortgage loans | |
|---|---|---|
| | 2019 | 2018 |
| Dutch Covered Bond Companies | 24,297 | 24,336 |
| | **24,297** | **24,336** |

In addition, subsidiaries of ING in Germany, Belgium and Australia also issued covered bonds with pledged mortgages loans of approximately EUR 15.8 billion (2018: EUR 14.0 billion) in total.

In general, the third-party investors in securities issued by the structured entity have recourse only to the assets of the entity and not to the assets of ING Group.

## 3. Consolidated ING sponsored Securitisation programme (Mont Blanc)

In the normal course of business, ING Group structures financing transactions for its clients by assisting them in obtaining sources of liquidity by selling the clients' receivables or other financial assets to a Special Purpose Vehicle (SPV). The senior positions in these transactions may be funded by the ING administered multi seller Asset Backed Commercial Paper (ABCP) conduit; Mont Blanc Capital Corp. (rated A-1/P-1). Mont Blanc Capital Corp. funds itself externally in the ABCP markets.

In its role as administrative agent, ING Group facilitates these transactions by acting as administrative agent, swap counterparty and liquidity provider to Mont Blanc Capital Corp. ING Group also provides support facilities (liquidity) backing the transactions funded by the conduit. The types of asset currently in the Mont Blanc conduit include trade receivables, consumer finance receivables and lease receivables.

ING Group supports the commercial paper programmes by providing Mont Blanc Capital Corp. with short-term liquidity facilities. Once drawn these facilities bear normal credit risk.

The liquidity facilities, provided to Mont Blanc are EUR 1,631 million (2018: EUR 1,173 million). The drawn liquidity amount is nil as at 31 December 2019 (2018: nil).

The standby liquidity facilities are reported under irrevocable facilities. All facilities, which vary in risk profile, are granted to Mont Blanc Capital Corp. subject to normal ING Group credit and liquidity risk analysis procedures. The fees received for services provided and for facilities are charged subject to market conditions.

### 4. Unconsolidated Securitisation programme

In 2013 ING transferred financial assets (mortgage loans) for an amount of approximately EUR 2 billion to a newly established special purpose vehicle (SPV). The transaction resulted in full derecognition of the financial assets from ING's statement of financial position. The derecognition did not have a significant impact on net result. Following this transfer ING continues to have two types of on-going involvement in the transferred assets: as counterparty to the SPV of a non-standard interest rate swap and as servicer of the transferred assets. ING has an option to unwind the transaction by redeeming all notes at their principal outstanding amount, in the unlikely event of changes in accounting and/or regulatory requirements that significantly impact the transaction. The fair value of the swap held by ING at 31 December 2019 amounted to EUR –45 million (2018: EUR –33 million); fair value changes on this swap recognised in the statement of profit or loss in 2019 were EUR 12 million (2018: EUR 8 million). Service fee income recognised, for the role as administrative agent, in the statement of profit or loss in 2019 amounted to EUR 2 million (2018: EUR 2 million). The cumulative income recognised in profit or loss since derecognition amounts to EUR 15 million.

### 5. Other structured entities

In the normal course of business, ING Group enters into transactions with structured entities as counterparty. Predominantly in its structured finance operations, ING can be instrumental in facilitating the creation of these structured entity counterparties. These entities are generally not included in the consolidated financial statements of ING Group, as ING facilitates these transactions as administrative agent by providing structuring, accounting, funding, lending, and operation services.

ING Group offers various investment fund products to its clients. ING Group does not invest in these investment funds for its own account nor acts as the fund manager.

## 50 Related parties

In the normal course of business, ING Group enters into various transactions with related parties. Parties are considered to be related if one party has the ability to control or exercise significant influence over the other party in making financial or operating decisions. Related parties of ING Group include, among others, its subsidiaries, associates, joint ventures, key management personnel, and various defined benefit and contribution plans. For post-employment benefit plans, reference is made to Note 36 'Pension and other postemployment benefits'. Transactions between related parties include rendering or receiving of services, leases, transfers under finance arrangements and provisions of guarantees or collateral. All transactions with related parties took place at conditions customary in the market. There are no significant provisions for doubtful debts or individually significant bad debt expenses recognised on outstanding balances with related parties.

### Subsidiaries

**Transactions with ING Groep N.V.'s main subsidiaries**

| | 2019 | 2018 |
|---|---|---|
| Assets | 44,242 | 34,902 |
| Liabilities | 163 | 140 |
| | | |
| Income received | 1,103 | 629 |
| Expenses paid | 9 | 26 |

Transactions between ING Groep N.V. and its subsidiaries are eliminated on consolidation. Reference is made to Note 48 'Principal subsidiaries' for a list of principal subsidiaries and their statutory place of incorporation.

Assets from ING's subsidiaries mainly comprise long-term funding. Liabilities to ING's subsidiaries mainly comprise short-term deposits.

## Associates and joint ventures

**Transactions with ING Group's main associates and joint ventures**

| | Associates | | Joint ventures | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Assets | 96 | 54 | | –0 |
| Liabilities | 97 | 98 | 6 | 1 |
| Off-balance sheet commitments | 29 | 120 | 0 | – |
| | | | | |
| Income received | 11 | 2 | | 0 |

Assets, liabilities, commitments, and income related to Associates and joint ventures result from transactions which are executed as part of the normal Banking business.

## Key management personnel compensation

Transactions with key management personnel (Executive Board, Management Board Banking and Supervisory Board) are transactions with related parties. In 2019 and 2018, three members of the Executive Board of ING Groep N.V. were also members of the Management Board Banking. The members of the Management Board Banking are considered to be key management personnel and their compensation is therefore included in the tables below.

**Key management personnel compensation (Executive Board and Management Board Banking)**

| 2019<br>in EUR thousands | Executive Board of ING Groep N.V. [3] | Management Board Banking [1,4] | Total |
|---|---|---|---|
| Fixed Compensation | | | |
| – Base salary | 4,587 | 3,847 | 8,434 |
| – Collective fixed allowances[2] | 1,167 | 937 | 2,104 |
| – Pension costs | 78 | 94 | 172 |
| – Severance benefits | | | |
| Variable compensation | | | |
| – Upfront cash | | 361 | 361 |
| – Upfront shares | 247 | 378 | 625 |
| – Deferred cash | | 541 | 541 |
| – Deferred shares | 371 | 566 | 937 |
| – Other | | | |
| Total compensation | **6,450** | **6,724** | **13,174** |

1 Excluding members that are also members of the Executive Board of ING Groep N.V. One Management Board Banking member was appointed to the Executive Board during the year.
2 The collective fixed allowances consist of two savings allowances applicable to employees in the Netherlands; an individual savings allowance of 3.5% and a collective savings allowance to compensate for loss of pension benefits with respect to salary in excess of EUR 107,539.
3 In 2019 one member of the Executive Board left and one member joined. The table includes their compensation earned in the capacity as board member and in addition an advisor fee for the period in which the activities were transferred to the successor.
4 One member left ING during the year. The table includes compensation earned in the capacity as board member.

In addition to above remuneration the members of the Executive Board and Management Board Banking receive other emoluments, such as Company Car, Travel and Accident Insurance, personnel discount on financial products, of EUR 0.4 million in total (2018: EUR 0.3 million).

**Key management personnel compensation (Executive Board and Management Board Banking)**

| 2018<br>in EUR thousands | Executive Board of ING Groep N.V. | Management Board Banking[1] | Total |
|---|---|---|---|
| Fixed Compensation | | | |
| – Base salary | 4,157 | 3,672 | 7,829 |
| – Collective fixed allowances [2] | 1,191 | 990 | 2,181 |
| – Pension costs | 78 | 103 | 181 |
| – Severance benefits [3] | 602 | | 602 |
| Variable compensation [4] | | | |
| – Upfront cash | | | |
| – Upfront shares | | | |
| – Deferred cash | | | |
| – Deferred shares | | | |
| – Other | | | |
| Total compensation | **6,028** | **4,765** | **10,793** |

1 Excluding members that are also members of the Executive Board of ING Groep N.V.
2 The collective fixed allowances consist of two savings allowances applicable to employees in the Netherlands; an individual savings allowance of 3.5% and a collective savings allowance to compensate for loss of pension benefits with respect to salary in excess of EUR 105,075.
3 Following the settlement agreement and in consultation with the Supervisory Board, the CFO stepped down from his position as member of the Executive Board of ING Group on 7 February 2019. In line with applicable regulations a severance payment was granted. The Supervisory Board has set the severance pay at a level of 50% of fixed annual pay.
4 No variable remuneration for 2018, as the members of the Executive Board and Management Board Banking volunteered to forfeit their entitlement to variable remuneration immediately, following the settlement agreement with the Dutch Public Prosecution Service as announced by ING on 4 September 2018.

**Key management personnel compensation (Supervisory Board)**

| in EUR thousands | 2019 | 2018 |
|---|---|---|
| Total compensation | 1,045 | 1,032 |

The table above shows the fixed remuneration, expense allowances and attendance fees for the Supervisory Board for 2019 and 2018.

**Loans and advances to key management personnel**

| | Amount outstanding 31 December | | Weighted average interest rate | | Repayments | |
|---|---|---|---|---|---|---|
| in EUR thousands | 2019 | 2018 | 2019 | 2018 | 2019 | 2018 |
| Executive Board members | 2,402 | 2,681 | 1.4% | 1.8% | 97 | |
| Management Board Banking | 350 | 550 | 2.6% | 2.3% | | |
| Supervisory Board members | | | | | | |
| Total | **2,752** | **3,231** | | | **97** | **–** |

**Number of ING Groep N.V. shares and stock options to key management personnel**

| | ING Groep N.V. shares | | Stock options on ING Groep N.V. shares | |
|---|---|---|---|---|
| in numbers | 2019 | 2018 | 2019 | 2018 |
| Executive Board members | 172,523 | 226,639 | 46,198 | 68,467 |
| Management Board Banking | 147,713 | 159,393 | | 27,240 |
| Supervisory Board members | 54,065 | 54,065 | | |
| Total number of shares and stock options | **374,301** | **440,097** | **46,198** | **95,707** |

Key management personnel compensation is generally included in Staff expenses in the statement of profit or loss. The total remuneration of the Executive Board and Management Board Banking is disclosed in the table above. Under IFRS, certain components of variable remuneration are not recognised in the statement of profit or loss directly, but are allocated over the vesting period of the award. The comparable amount recognised in Staff expenses in 2019 and included in Total expenses in 2019, relating to the fixed expenses of 2019 and the vesting of variable remuneration of earlier performance years, is EUR 11 million in 2019 (2018: EUR 12 million).

## 51 Subsequent events

There are no subsequent events to report.

# 52 Capital Management

## Objectives

Group Treasury ('GT') Capital Management, part of Balance Sheet & Capital Management, is responsible for maintaining the adequate capitalisation of ING Group and ING Bank entities, to manage the risk associated with ING's business activities. This involves not only managing, planning and allocating capital within ING Group, ING Bank and its various entities, but also helping to execute necessary capital market transactions, term (capital) funding and risk management transactions. ING takes an integrated approach to assess the adequacy of its capital position in relation to its risk profile and operating environment. This means GT Capital Management takes into account both regulatory and internal, economic based metrics and requirements as well as the interests of key stakeholders such as shareholders and rating agencies.

ING applies the following main capital definitions:

- Common Equity Tier 1 capital (CET1) - is defined as shareholders' equity less regulatory adjustments. CET1 capital divided by risk-weighted assets equals the CET1 ratio.
- Tier 1 capital – is defined as CET1 capital, Additional Tier 1 (hybrid) securities and other regulatory adjustments. Tier 1 capital divided by risk-weighted assets equals the Tier 1 capital ratio.
- Total capital – is Tier 1 capital, subordinated Tier 2 liabilities and regulatory adjustments. Total capital divided by risk-weighted assets equals the Total capital ratio.
- Common Equity Tier 1 ratio ambition – is built on potential impact of a standardised and pre-determined 1-in-10-year stress event (i.e. at a 90% confidence level with a 1-year horizon).
- Leverage ratio – is defined as Tier 1 capital divided by the total exposure amount.

## Capital Developments

The capital position remained robust in 2019 reflecting strong profitability with a lower risk weight and complemented with the optimisation of the capital structure. At both the consolidated and entity level, ING has sufficient buffers to withstand certain adverse scenarios without breaching currently applicable and likely future requirements.

The CET1 ratio at the end of the year improved as risk-weighted assets increased due to volume growth and model impacts, effects that were offset by profit retention and positive risk migration. ING continues to maintain a strong and high quality capital level. ING Groep N.V. has a Common Equity Tier 1 ratio of 14.6% as at 31 December 2019 versus a current CRR/CRD IV solvency requirement of 11.83%.

The Group's Tier 1 ratio (including grandfathered securities) increased from 16.2% to 16.7%, as of 31 December 2019. Compared with previous year, the Total capital ratio (including grandfathered securities) increased from 18.4% to 19.1%.

ING Bank N.V. has a CET1 ratio of 13.1%, thereby complying with CRR/CRD IV solvency requirements. ING Bank N.V. paid EUR 2,819 million of dividend to ING Group in 2019. The Tier 1 ratio (including grandfathered securities) increased from 14.5% to 15.1%, primarily reflecting developments in ING Bank's CET1 ratio. The Banks's total capital ratio (including grandfathered securities) increased from 17.2% to 17.9%.

## ING Group capital position according to CRR/CRD IV

| | 2019 | 2018 |
|---|---|---|
| Shareholders' equity | 53,769 | 50,932 |
| Interim profit not included in CET1 capital[1] | –1,754 | –1,712 |
| Other adjustments | –4,464 | –3,776 |
| Regulatory adjustments | –6,217 | –5,489 |
| **Available common equity Tier 1 capital** | **47,552** | **45,443** |
| | | |
| Additional Tier 1 securities[2] | 6,916 | 5,339 |
| Regulatory adjustments additional Tier 1 | 51 | 48 |
| **Available Tier 1 capital** | **54,519** | **50,831** |
| | | |
| Supplementary capital Tier 2 bonds[3] | 8,943 | 8,248 |
| Regulatory adjustments Tier | –1,158 | –1,136 |
| **Available Total capital** | **62,303** | **57,943** |
| | | |
| Risk weighted assets | 326,414 | 314,149 |
| | | |
| Common equity Tier 1 ratio | 14.57% | 14.47% |
| Tier 1 ratio | 16.70% | 16.18% |
| Total capital ratio | 19.09% | 18.44% |

1) The interim profit not included in CET1 capital as per 31 December 2019 (EUR 1,754 million) includes EUR 42 million for 4Q 2019.(Full Year 2019: EUR 2,689 million).
2) Including EUR 5,312 million which is CRR/CRD IV-compliant (2018: EUR 2,833 million) and EUR 1,604 million to be replaced as capital recognition is subject to CRR/CRD IV grandfathering rules (2018: EUR 2,506 million).
3) Including EUR 8,789 million which is CRR/CRD IV-compliant (2018: EUR 8,079 million), and EUR 153 million to be replaced as capital recognition is subject to CRR/CRD IV grandfathering rules (2018: EUR 168 million). In accordance with the applicable regulation, credit and operational risk models used in the capital ratios calculations are not audited.

In accordance with the applicable regulation, credit and operational risk models used in the capital ratios calculations are not audited.

## ING Bank NV capital position according to CRR/CRD IV

| | 2019 | 2018 |
|---|---|---|
| Shareholders' equity | 46,924 | 44,173 |
| Interim profit not included in CET1 capital[1] | –43 | –174 |
| Other adjustments | –4,309 | –3,621 |
| Regulatory adjustments | –4,352 | –3,794 |
| **Available common equity Tier 1 capital** | **42,572** | **40,379** |
| | | |
| Additional Tier 1 securities[2] | 6,752 | 5,179 |
| Regulatory adjustments additional Tier 1 | 74 | 62 |
| **Available Tier 1 capital** | **49,398** | **45,619** |
| | | |
| Supplementary capital Tier 2 bonds[3] | 8,942 | 8,248 |
| Regulatory adjustments Tier 2 | 55 | 66 |
| **Available Total capital** | **58,394** | **53,933** |
| | | |
| Risk weighted assets | 326,193 | 313,572 |
| | | |
| Common equity Tier 1 ratio | 13.05% | 12.88% |
| Tier 1 ratio | 15.14% | 14.55% |
| Total capital ratio | 17.90% | 17.20% |

1) The interim profit not included in CET1 capital as per 31 December 2019 (EUR 43 million), of which EUR 42 million relates to the result of 4Q 2019. (Full Year 2019: EUR 2,689 million).
2) Including EUR 5,758 million which is CRR/CRD IV-compliant (2018: EUR 3,271 million) and EUR 994 million to be replaced as capital recognition is subject to CRR/CRD IV grandfathering rules (2018: EUR 1,907 million).
3) Including EUR 8,789 million which is CRR/CRD IV-compliant (2018: EUR 8,079 million), and EUR 153 million to be replaced as capital recognition is subject to CRR/CRD IV grandfathering rules (2018: EUR 168 million). In accordance with the applicable regulation, credit and operational risk models used in the capital ratios calculations are not audited.

In accordance with the applicable regulation, credit and operational risk models used in the capital ratios calculations are not audited.

## Dividend

ING Group's dividend policy aims to pay a progressive dividend that will reflect considerations including expected future capital requirements, growth opportunities available to the Group, net earnings, and regulatory developments. The Executive Board proposes to pay a total cash dividend of EUR 2,689 million, or EUR 0.69 per ordinary share, over the financial year 2019. This is subject to the approval of shareholders at the Annual General Meeting in April 2020.
Taking into account the interim dividend of EUR 0.24 per ordinary share paid in August 2019, the final dividend will amount to EUR 0.45 per ordinary share and will be paid fully in cash. The total amount of EUR 1,754 million is completely covered by the remaining balance of 'interim profits not included in CET1 capital' at year-end 2019.

## Processes for managing capital

Besides assessing capital adequacy, ING also ensures the availability of sufficient capital above the set targets and limits for ING Group and ING Bank. Additionally, GT Capital Management ensures adherence to the set limits and targets by planning and executing capital management transactions. The ongoing assessment and monitoring of capital adequacy is embedded in the capital planning process within the ICAAP framework. As part of the dynamic business planning process, ING prepares a capital and funding plan on a regular basis for all its material businesses and assesses continuously the timing, need and feasibility for capital management actions in scope of its execution strategy. Sufficient financial flexibility should be preserved to meet important financial objectives. ING's risk appetite statements set targets and are at the foundation of the capital plan. These limits are cascaded to the different businesses in line with our risk management framework.

Adverse planning and stress testing are integral components of ING's risk and capital management framework. It allows us to (i) identify and assess potential vulnerabilities in our businesses, business model, portfolios or operating environment; (ii) understand the sensitivities of the core assumptions used in our strategic and capital plans; and (iii) improve decision-making and business steering through balancing risk and return following a foresighted and prudent management approach. In addition to internal stress test scenarios reflecting the outcomes of the annual risk assessment, ING also participates in regulatory stress test exercises. ING participated in the 2018 EU-wide stress test conducted by EBA.

## Regulatory requirements

Capital adequacy and the use of required regulatory capital are based on the guidelines developed by the Basel Committee on Banking Supervision (The Basel Committee) and the European Union Directives, as implemented by the Dutch Central Bank (Dutch Central Bank until 3 November 2014, the ECB thereafter) for supervisory purposes. In 2010, the Basel Committee issued new solvency and liquidity requirements that superseded Basel II. The minimum requirements, excluding buffers, for the CET 1 ratio is 4.5%, the minimum Tier 1 requirement is 6% and the Total capital ratio is 8% of risk-weighted assets.

The CET1 requirement for ING Group at a consolidated level was set at 11.83% in 2019. This requirement is the sum of a 4.5% Pillar I requirement, a 1.75% Pillar II requirement, a 2.5% Capital Conservation Buffer (CCB), a 0.08% Countercyclical Buffer (based on December 2019 positions) and the 3.0% Systemic Risk Buffer (SRB) that are set separately for Dutch systemic banks by the Dutch Central Bank (De Nederlandsche Bank). Due to changes in the Countercyclical Buffer setting in some jurisdictions, ING expects an increase to 0.24% in 2020 (based on 4Q 2019 positions). This requirement excludes the Pillar II capital guidance, which is not disclosed.

The Maximum Distributable Amount (MDA) trigger level stood at 11.83% in 2019, based on stable Pillar II capital requirements. In the event that ING Group breaches the MDA level, ING may face restrictions on dividend payments, AT1 instruments coupons and bonus payments.

## Ratings

**Main credit ratings of ING at 31 December 2019**

| | Standard & Poor's | | Moody's | | Fitch | |
|---|---|---|---|---|---|---|
| | Rating | Outlook | Rating | Outlook | Rating | Outlook |
| **ING Groep N.V.** | | | | | | |
| Long-term | A- | Stable | Baa1 | Stable | A+ | Stable |
| **ING Bank N.V.** | | | | | | |
| Long-term | A+ | Stable | Aa3 | Stable | AA- | Stable |
| Short-term | A-1 | | P-1 | | F1+ | |

ING's key credit ratings and outlook are shown in the table above. Each of these ratings reflects only the view of the applicable rating agency at the time the rating was issued, and any explanation of the significance of a rating may be obtained only from the rating agency.

A security rating is not a recommendation to buy, sell or hold securities and each rating should be evaluated independently of other ratings. There is no assurance that any credit rating will remain in effect for any given period of time or that a rating will not be lowered, suspended or withdrawn entirely by the rating agency if, in the rating agency's judgment, circumstances so warrant. ING accepts no responsibility for the accuracy or reliability of the ratings.

# Authorisation of Consolidated Financial statements

Amsterdam, 2 March 2020

## The Supervisory Board

G.J. (Hans) Wijers, chairman
H.J.M. (Hermann-Josef) Lamberti, vice-chairman
J.P. (Jan Peter) Balkenende
E.F.C.B. (Eric) Boyer de la Giroday
M. (Mariana) Gheorghe
M. (Margarete) Haase
A.M.G. (Mike) Rees
H.W.P.M.A. (Herna) Verhagen

## The Executive Board

R.A.J.G. (Ralph) Hamers, CEO and chairman
T. (Tanate) Phutrakul, CFO
S.J.A. (Steven) van Rijswijk, CRO

# Parent company statement of financial position

as at 31 December before appropriation of result

| in EUR million | 2019 | 2018 [1] |
|---|---|---|
| **Assets** | | |
| Investments in group companies 1 | 47,109 | 44,358 |
| Fixed assets | **47,109** | **44,358** |
| Receivables from group companies 2 | 44,242 | 34,902 |
| Other assets | 59 | 93 |
| **Current assets** | **44,301** | **34,996** |
| **Total assets** | **91,411** | **79,354** |

| in EUR million | 2019 | 2018 [1] |
|---|---|---|
| **Equity 3** | | |
| Share capital | 39 | 39 |
| Share premium | 17,078 | 17,050 |
| Legal and statutory reserves | 3,999 | 3,597 |
| Other reserves | 28,052 | 25,704 |
| Unappropriated result | 4,601 | 4,543 |
| Total equity | **53,769** | **50,932** |
| **Liabilities** | | |
| Subordinated loans 4 | 13,113 | 10,492 |
| Other non-current liabilities 5 | 24,308 | 17,709 |
| **Non-current liabilities** | **37,420** | **28,201** |
| Other liabilities 5 | 221 | 221 |
| **Current liabilities** | **221** | **221** |
| Total equity and liabilities | **91,411** | **79,354** |

1 As at 31 December 2019 liabilities are presented based on their outstanding maturities. The prior period was updated to improve consistency and comparability resulting in a shift from current to non-current liabilities of EUR 296 million.

References relate to the accompanying notes. These form an integral part of the Parent company financial statements.

# Parent company statement of profit or loss

for the years ended 31 December

| in EUR million | 2019 | 2018 |
|---|---|---|
| Staff expenses 6 | 2 | –10 |
| Other expenses 7 | 18 | 3 |
| **Total expenses** | **19** | **–7** |
| | | |
| Interest and other financial income 8 | 1,074 | 600 |
| Valuation results 9 | –11 | 93 |
| Interest and other financial expenses 10 | –1,070 | –638 |
| **Net interest and other financial income** | **–6** | **55** |
| | | |
| **Result before tax** | **–25** | **62** |
| Taxation | 64 | –10 |
| **Result after tax** | **–89** | **72** |
| Result from (disposal of) group companies and participating interests after taxation 11 | 4,870 | 4,631 |
| **Net result** | **4,781** | **4,703** |

References relate to the accompanying notes. These form an integral part of the Parent company financial statements.

# Parent company statement of changes in equity

| in EUR million | Share capital | Share premium | Legal and statutory reserves | Other reserves | Unappro-priated results | Total |
|---|---|---|---|---|---|---|
| **Balance as at 31 December 2018** | **39** | **17,050** | **3,597** | **25,704** | **4,543** | **50,932** |
| | | | | | | |
| Realised and unrealised revaluations of equity securities | | | –335 | 472 | | 137 |
| Unrealised revaluations debt instruments and other revaluations | | | –31 | | | –31 |
| Realised gains/losses transferred to the statement of profit or loss | | | –33 | | | –33 |
| Changes in cash flow hedge reserve | | | 604 | | | 604 |
| Change in fair value of own credit risk of financial liabilities at fair value through profit or loss | | | –123 | 6 | | –116 |
| Realised and unrealised revaluations property in own use | | | 49 | 9 | | 58 |
| Remeasurement of the net defined benefit asset/liability | | | 58 | | | 58 |
| Exchange rate differences and other | | | –36 | | | –36 |
| Total amount recognised directly in equity | | | **154** | **487** | | **641** |
| Net result | | | 180 | | 4,601 | 4,781 |
| | | | **334** | **487** | **4,601** | **5,422** |
| | | | | | | |
| Transfer from Unappropriated result | | | | 4,543 | –4,543 | |
| Dividends | | | | –2,650 | | –2,650 |
| Changes in treasury shares | | | | 1 | | 1 |
| Employee stock option and share plans | 0 | 28 | | 13 | | 41 |
| Changes in the composition of the group and other changes | | | 69 | –46 | | 23 |
| **Balance as at 31 December 2019** | **39** | **17,078** | **3,999** | **28,052** | **4,601** | **53,769** |

Changes in individual components are presented in Note 4 'Equity'.

| in EUR million | Share capital | Share premium | Legal and statutory reserves | Other reserves | Unappro-priated results | Total |
|---|---|---|---|---|---|---|
| **Balance as at 31 December 2017** | **39** | **17,006** | **4,385** | **24,224** | **4,752** | **50,406** |
| Effect of change in accounting policy | | | –653 | –390 | | –1,043 |
| Balance as at 1 January 2018 | 39 | 17,006 | 3,732 | 23,834 | 4,752 | 49,363 |
| | | | | | | |
| Realised and unrealised revaluations of equity securities | | | –518 | 56 | | –461 |
| Unrealised revaluations debt instruments and other revaluations | | | –163 | | | –163 |
| Realised gains/losses transferred to the statement of profit or loss | | | –54 | | | –54 |
| Changes in cash flow hedge reserve | | | 342 | | | 342 |
| Change in fair value of own credit risk of financial liabilities at fair value through profit or loss | | | 199 | | | 199 |
| Realised and unrealised revaluations property in own use | | | –2 | 3 | | 1 |
| Remeasurement of the net defined benefit asset/liability | | | 6 | | | 6 |
| Exchange rate differences and other | | | –380 | | | –380 |
| Total amount recognised directly in equity | | | **–570** | **59** | | **–511** |
| Net result | | | 160 | | 4,543 | 4,703 |
| | | | **–410** | **59** | **4,543** | **4,192** |
| | | | | | | |
| Transfer from Unappropriated result | | | | 4,752 | –4,752 | |
| Dividends | | | | –2,607 | | –2,607 |
| Changes in treasury shares | | | | 4 | | 4 |
| Employee stock option and share plans | 0 | 44 | | 19 | | 63 |
| Changes in the composition of the group and other changes | | | 275 | –357 | | –82 |
| **Balance as at 31 December 2018** | **39** | **17,050** | **3,597** | **25,704** | **4,543** | **50,932** |

Changes in individual components are presented in Note 4 ‘Equity’.

# Notes to the parent company financial statements

## Basis of presentation

ING Groep N.V. is a company domiciled in Amsterdam, the Netherlands and is registered at the Commercial Register of Amsterdam under number 33231073.

The Parent company financial statements of ING Groep N.V. are prepared in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code. In accordance with subsection 8 of section 362, Book 2 of the Dutch Civil Code, the recognition and measurement principles applied in these Parent company financial statements are the same as those applied in the Consolidated financial statements, reference is made to Note 1 'Accounting policies' of the Consolidated financial statements. Investments in Group companies are accounted for in the Parent company accounts according to the equity method.

A list containing the information referred to in Section 379 (1), Book 2 of the Dutch Civil Code has been filed with the office of the Commercial Register of Amsterdam, in accordance with Section 379 (5), Book 2 of the Dutch Civil Code.

The parent company financial statements are presented in euros, rounded to the nearest million, unless stated otherwise. Amounts may not add up due to rounding.

## Parent company equity and related reserves

The total amount of equity in the Parent company financial statements equals Shareholders' equity (parent) in the consolidated financial statements. Certain components within equity are different as a result of the following presentation differences between the parent company accounts and consolidated accounts:

- Unrealised revaluations within consolidated Group companies, presented in Other reserves - Revaluation reserve in the consolidated accounts, are presented in the Share of participating interests reserve in the parent company accounts;
- The reserve for cash flow hedges within consolidated Group companies, presented in Other reserves – Revaluation reserve in the consolidated accounts is included in the Share of participating interests reserve, in the parent company accounts on a net basis.
- Foreign currency translation on consolidated Group companies, presented in Other reserves - Currency translation reserve in the consolidated accounts, is presented in the Share of participating interests reserve in the parent company accounts.

A legal reserve is carried at an amount equal to the share in the results of participating interests since their first inclusion at net asset value less the amount of profit distributions to which rights have accrued in the interim. Profit distributions which can be repatriated to the Netherlands without restriction are likewise deducted from the Share of participating interests reserve.

# Notes to the Parent company statement of financial position

## 1 Investments in Group companies

**Investments in Group companies**

| | 2019 | | 2018 | |
|---|---|---|---|---|
| | Interest held (%) | Statement of financial position value | Interest held (%) | Statement of financial position value |
| ING Bank | 100% | 46,924 | 100% | 44,162 |
| Other | | 185 | | 196 |
| | | **47,109** | | **44,358** |

**Changes in investments in Group companies**

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 44,358 | 43,832 |
| Effect of change in accounting policy | | –1,043 |
| Revaluations | 703 | –549 |
| Results | 4,870 | 4,631 |
| Dividends | –2,823 | –2,517 |
| | **47,108** | **44,354** |
| | | |
| Changes in ING Groep N.V. shares held by group companies | 1 | 4 |
| Closing balance | **47,109** | **44,358** |

## 2 Receivables from Group companies

**Receivables from Group companies**

| | 2019 | 2018 |
|---|---|---|
| Receivables from group companies | 44,242 | 34,902 |
| | **44,242** | **34,902** |

Receivables from Group companies include EUR 12,998 million subordinated loans provided by ING Group N.V. to ING Bank N.V. (2018: EUR 10,358 million).

As at 31 December 2019 an amount of EUR 40,917 million (2018: EUR 30,632 million) is expected to be settled after more than one year from the balance sheet date.

## 3 Equity

**Equity**

| | 2019 | 2018 |
|---|---|---|
| Share capital | 39 | 39 |
| Share premium | 17,078 | 17,050 |
| Legal and statutory reserves | 3,999 | 3,597 |
| Other reserves | 28,052 | 25,704 |
| Unappropriated result | 4,601 | 4,543 |
| Total equity | **53,769** | **50,932** |

## Share capital

### Share capital

| | Ordinary shares (par value EUR 0.01) | | | |
|---|---|---|---|---|
| | Number x 1,000 | | Amount | |
| | 2019 | 2018 | 2019 | 2018 |
| Authorised share capital | 14,729,000 | 14,729,000 | 147 | 147 |
| Unissued share capital | 10,832,266 | 10,837,272 | 108 | 108 |
| Issued share capital | **3,896,734** | **3,891,728** | **39** | **39** |

### Changes in issued share capital

| | Ordinary shares (par value EUR 0.01) | |
|---|---|---|
| | Number x 1,000 | Amount |
| Issued share capital as at 1 January 2018 | **3,885,790** | **39** |
| Issue of shares | 5,938 | |
| Issued share capital as at 31 December 2018 | **3,891,728** | **39** |
| Issue of shares | 5,006 | – |
| Issued share capital as at 31 December 2019 | **3,896,734** | **39** |

In 2019, ING Groep N.V. issued 5.0 million ordinary shares (2018: 5.9 million). These issues were made in order to fund obligations arising from share-based employee incentive programmes.

## Share premium

### Changes in share premium

| | 2019 | 2018 |
|---|---|---|
| Opening balance | 17,050 | 17,006 |
| Issue of shares | 28 | 44 |
| Closing balance | **17,078** | **17,050** |

## Legal and statutory reserves

### Changes in legal and statutory reserves

| 2019 | Share of participating interests reserve | Total |
|---|---|---|
| Opening balance | 3,597 | 3,597 |
| Unrealised revaluations Equity and Debt instruments and other | –439 | –439 |
| Realised gains/losses transferred to the statement of profit or loss | –33 | –33 |
| Changes in cash flow hedge reserve | 604 | 604 |
| Changes in net defined benefit asset/liability remeasurement reserve | 58 | 58 |
| Exchange rate differences and other | –36 | –36 |
| Changes in composition of the group and other changes | 249 | 249 |
| Closing balance | **3,999** | **3,999** |

### Changes in legal and statutory reserves

| 2018 | Share of participating interests reserve | Total |
|---|---|---|
| Opening balance | 4,385 | 4,385 |
| Effect of change in accounting policy | –653 | –653 |
| Unrealised revaluations Equity and Debt instruments and other | –481 | –481 |
| Realised gains/losses transferred to the statement of profit or loss | –54 | –54 |
| Changes in cash flow hedge reserve | 342 | 342 |
| Changes in net defined benefit asset/liability remeasurement reserve | 6 | 6 |
| Exchange rate differences and other | –380 | –380 |
| Changes in composition of the group and other changes | 432 | 432 |
| Closing balance | **3,597** | **3,597** |

The Share of participating interests reserve includes the following components: Reserve for non-distributable retained earnings of participating interests of EUR 3,189 million (2018: EUR 2,940 million), Revaluation reserve of participating interests of EUR 1,146 million (2018: EUR 1,051 million) and Net defined benefit asset/liability remeasurement reserve of EUR –336 million (2018: EUR –394 million).

As at 31 December 2019, the Share of participating interests reserve includes an amount of EUR 1,818 million (2018: EUR 1,638 million) related to the former Stichting Regio Bank and the former Stichting Vakbondsspaarbank SPN that cannot be freely distributed.

Changes in the value of hedging instruments that are designated as net investment hedges, are included in the line Exchange rate differences and other.

## Other reserves

### Changes in other reserves

| 2019 | Retained earnings | Treasury shares | Total |
|---|---|---|---|
| Opening balance | 25,714 | –11 | 25,704 |
| Changes in treasury shares | | 1 | 1 |
| Transfer from Unappropriated result | 4,543 | | 4,543 |
| Employee stock option and share plans | 13 | | 13 |
| Dividends | –2,650 | | –2,650 |
| Changes in the composition of the group and other changes | 441 | | 441 |
| Closing balance | **28,062** | **–10** | **28,052** |

### Changes in other reserves

| 2018 | Retained earnings | Treasury shares | Total |
|---|---|---|---|
| Opening balance | 24,238 | –15 | 24,224 |
| Effect of change in accounting policy | –390 | – | –390 |
| Changes in treasury shares | – | 4 | 4 |
| Transfer from Unappropriated result | 4,752 | – | 4,752 |
| Employee stock option and share plans | 19 | – | 19 |
| Dividends | –2,607 | – | –2,607 |
| Changes in the composition of the group and other changes | –298 | – | –298 |
| Closing balance | **25,714** | **–11** | **25,704** |

The Share of participating interests reserve cannot be freely distributed. Retained earnings can be freely distributed, except for an amount equal to the negative balance in each of the components of the Share of participating interests reserve. Unrealised gains and losses on derivatives, other than those used in cash flow hedges, are presented in the statement of profit or loss and are therefore part of Retained earnings and are not included in Share of participating interests reserve. The total amount of non-distributable reserves, in accordance with the financial reporting requirements per Part 9 of Book 2 of the Dutch Civil Code, is EUR 8,398 million (2018: EUR 7,700 million).
Reference is made to Note 20 'Equity' and the Capital Management section in the Consolidated financial statements for additional information, including restrictions with respect to dividend and repayment of capital.

### Change in treasury shares

| | Amount | | Number | |
|---|---|---|---|---|
| | 2019 | 2018 | 2019 | 2018 |
| Opening balance | –11 | –15 | 1,137,701 | 944,257 |
| Purchased/sold | 1 | 4 | –218,314 | 193,444 |
| Closing balance | **–10** | **–11** | **919,387** | **1,137,701** |

# 4 Subordinated loans

## Subordinated loans

| | | | | | Statement of financial position value | |
|---|---|---|---|---|---|---|
| Interest rate | Year of issue | Due date | Notional amount in original currency | | 2019 | 2018[1] |
| 1.000% | 2019 | 13 November 2030 | EUR | 1,000 | 996 | |
| 5.750% | 2019 | Perpetual | USD | 1,500 | 1,336 | |
| 6.750% | 2019 | Perpetual | USD | 1,250 | 1,121 | |
| 4.700% | 2018 | 22 March 2028 | USD | 1,250 | 1,124 | 1,102 |
| 2.000% | 2018 | 22 March 2030 | EUR | 750 | 759 | 757 |
| 1.625% | 2017 | 26 September 2029 | EUR | 1,000 | 997 | 995 |
| 4.000% | 2017 | 14 September 2032 | USD | 100 | 90 | 88 |
| 4.250% | 2017 | 23 June 2032 | USD | 160 | 146 | 143 |
| 1.150% | 2017 | 14 June 2029 | JPY | 12,000 | 98 | 95 |
| 1.100% | 2017 | 31 May 2027 | JPY | 10,000 | 82 | 80 |
| 3.000% | 2017 | 11 April 2028 | EUR | 1,000 | 1,058 | 1,069 |
| 2.500% | 2017 | 15 February 2029 | EUR | 750 | 764 | 764 |
| 6.875% | 2016 | Perpetual | USD | 1,000 | 900 | 882 |
| 6.500% | 2015 | Perpetual | USD | 1,250 | 1,123 | 1,101 |
| 6.000% | 2015 | Perpetual | USD | 1,000 | 901 | 883 |
| 9.000% | 2008 | Perpetual | EUR | 10 | 10 | 10 |
| 6.375% | 2007 | Perpetual | USD | 1,045 | – | 915 |
| 6.125% | 2005 | Perpetual | USD | 700 | 631 | 619 |
| Variable | 2004 | Perpetual | EUR | 555 | 556 | 557 |
| Variable | 2003 | Perpetual | EUR | 430 | 421 | 431 |
| | | | | | **13,113** | **10,492** |

1. As at 31 December 2019 liabilities are presented based on their outstanding maturities. The prior period was updated to improve consistency and comparability resulting in a shift from current to non-current liabilities of EUR 296 million.

In February respectively September 2019, ING Groep N.V. issued USD 1,250 million and USD 1,500 million securities that qualify as Perpetual Additional Tier 1 Contingent Convertible Capital Securities with coupons of 6.75% until 16 April 2024 (First Call Date) and 5.75% until 16 November 2026 (First Call Date).

Reference is made to the ING Group Consolidated financial statements, Note 19 'Subordinated loans' and Note 20 'Equity'.

The Subordinated loans rank subordinated to the Other liabilities in a winding-up of ING Group.

## 5 Other liabilities

**Other liabilities by type**

| | 2019 | 2018 |
|---|---|---|
| Debenture loans | 24,290 | 17,705 |
| Derivatives from group companies | 18 | 4 |
| **Non-Current Other Liabilities** | **24,308** | **17,709** |
| | | |
| Debenture loans | | |
| Amounts owed to group companies | 145 | 136 |
| Other amounts owed and accrued liabilities | 75 | 85 |
| **Other Liabilities** | **221** | **221** |

As at 31 December 2019 liabilities are presented based on their outstanding maturities. The prior period was updated to improve consistency and comparability resulting in a shift from current to non-current liabilities of EUR 296 million.

**Debenture loans**

| Interest rate | Year of issue | Due date | 2019 | 2018 |
|---|---|---|---|---|
| 2.755% | 2019 | 03 September 2031 | 102 | |
| 0.100% | 2019 | 03 September 2025 | 998 | |
| 4.050% | 2019 | 09 April 2029 | 896 | |
| 3.550% | 2019 | 09 April 2024 | 894 | |
| 1.625% | 2019 | 21 March 2029 | 139 | |
| 1.998% | 2019 | 19 March 2031 | 46 | |
| 1.074% | 2019 | 21 February 2029 | 173 | |
| 0.810% | 2019 | 21 February 2024 | 729 | |
| 3.000% | 2019 | 18 February 2026 | 1,197 | |
| 5.000% | 2019 | 31 January 2031 | 85 | |
| 3.920% | 2019 | 23 January 2029 | 79 | |
| 2.125% | 2019 | 10 January 2026 | 1,018 | |
| 3.399% | 2018 | 28 December 2030 | 71 | 67 |
| 1.169% | 2018 | 13 December 2028 | 157 | 152 |
| 0.848% | 2018 | 13 December 2023 | 880 | 852 |
| 3.790% | 2018 | 13 December 2030 | 152 | 151 |
| 5.000% | 2018 | 05 June 2029 | 110 | 108 |
| variable | 2018 | 05 December 2022 | 250 | 247 |
| 2.500% | 2018 | 15 November 2030 | 1,503 | 1,499 |
| 4.625% | 2018 | 06 January 2026 | 1,134 | 1,093 |
| 4.100% | 2018 | 02 October 2023 | 1,347 | 1,320 |
| 4.550% | 2018 | 02 October 2028 | 1,120 | 1,097 |
| variable | 2018 | 02 October 2023 | 448 | 439 |
| 2.000% | 2018 | 20 September 2028 | 1,502 | 1,499 |
| variable | 2018 | 20 September 2023 | 999 | 998 |
| 1.000% | 2018 | 20 September 2023 | 998 | 995 |
| 1.125% | 2018 | 14 February 2025 | 1,006 | 1,004 |
| 3.950% | 2017 | 29 March 2027 | 1,344 | 1,318 |
| 3.150% | 2017 | 29 March 2022 | 1,343 | 1,317 |
| variable | 2017 | 29 March 2022 | 889 | 872 |
| 0.750% | 2017 | 09 March 2022 | 1,506 | 1,504 |
| 1.375% | 2017 | 11 January 2028 | 1,011 | 1,010 |
| 4.699% | 2007 | 01 June 2035 | 164 | 163 |
| | | | **24,290** | **17,705** |

The number of debentures held by Group companies as at 31 December 2019 is nil with a statement of financial position value of nil (2018: nil with a statement of financial position value of nil).

**Derivatives from Group companies by remaining term**

| | 2019 | 2018 |
|---|---|---|
| More than 5 years | 18 | 4 |
| | **18** | **4** |

# Notes to the Parent company statement of profit or loss

## 6 Staff expenses

**Staff expenses**

| | 2019 | 2018 |
|---|---|---|
| Pension costs and other staff related benefit costs | 2 | –10 |
| | **2** | **–10** |

The 2018 negative staff expenses relate to a release of provision for cash-settled employee share bases payments.

### Remuneration of Senior Management, Executive Board and Supervisory Board

The information on share-based payment plans and remuneration of the members of the Executive Board and the Supervisory Board is included in the Consolidated financial statements. Reference is made to Note 50 'Related parties'

## 7 Other expenses

**Other expenses**

| | 2019 | 2018 |
|---|---|---|
| External advisory fees | 7 | 1 |
| Other | 11 | 2 |
| | **18** | **3** |

## 8 Interest and other financial income

**Interest and other financial income**

| | 2019 | 2018 |
|---|---|---|
| Interest income | 1,074 | 600 |
| | **1,074** | **600** |

Included in Interest and other financial income is EUR 1074 million (2018: EUR 600 million) related to Group companies.

## 9 Valuation results

Included in 2018 Valuation results, are valuation results on non-trading derivatives related to warrants on the shares of Voya and NN Group amounting to EUR 90 million. As at 31 December 2018 ING no longer holds any warrants on the shares of Voya and NN Group.

## 10 Interest and other financial expenses

**Interest and other financial expenses**

| | 2019 | 2018 |
|---|---|---|
| Interest expenses | –1,069 | –633 |
| Other financial expenses | –0 | –5 |
| | **–1,070** | **–638** |

Included in Interest and other financial expenses is EUR 21 million (2018: EUR 7 million) related to Group companies.

## 11 Result from Group companies and participating interests after taxation

**Result from Group companies and participating interests after taxation**

| | 2019 | 2018 |
|---|---|---|
| Result of group companies | 4,870 | 4,631 |
| | **4,870** | **4,631** |

## 12 Other

### Fees for audit and non-audit services

Reference is made to the ING Group Consolidated financial statements, Note 28 'Other operating expenses' for disclosures related to fees for audit and non-audit services.

### Guarantees

ING Group has issued certain guarantees as participant in collective arrangements of national banking funds and as a participant in required collective guarantee schemes. For example, ING Bank N.V. provided a guarantee to the German Deposit Guarantee Fund ('Einlagensicherungsfonds' or ESF) under section 5 (10) of the by-laws of this fund, where ING Bank N.V. indemnifies the Association of German Banks Berlin against any losses it might incur as result of actions taken with respect to ING Germany. The ESF is a voluntary collective guarantee scheme for retail savings and deposits in excess of EUR 100,000.

As at 31 December 2019, ING Groep N.V. guarantees various US dollar debentures (that mature between 2023 and 2036) which were issued by a subsidiary of Voya Financial Inc. In the Shareholder's agreement between ING Groep N.V. and Voya Financial Inc. it is agreed that the aggregate outstanding principal amount of the debentures will be reduced to nil as at 31 December 2019 (2018: EUR 87 million).

Per the Shareholder's agreement, the decrease in the aggregate outstanding principal shall be deemed to have been reduced to the extent of collateral deposited by Voya Financial Inc. As at 31 December 2019, EUR 331 million (2018: EUR 233 million) was pledged to ING Groep N.V. as collateral.

### Claim agreements

In the ordinary course of business ING Group have entered into a number of agreements whereby ING Group are provided and being provided indemnifications related to sale of our past businesses and agreements whereby ING Group made detailed arrangements regarding allocation and handling of claims.

### Fiscal unity

ING Groep N.V. forms a fiscal unity with several Dutch banking entities for corporation tax purposes. ING Groep N.V., ING Bank N.V. and its banking subsidiaries that form part of the fiscal unity are jointly and severally liable for taxation payable by the fiscal unity. Settlements of corporate income tax paid or received are executed by ING Bank N.V.

## 13 Proposed appropriation of results

For 2019, the Executive Board, with the approval of the Supervisory Board, has proposed a cash dividend of EUR 0.69 per ordinary share of EUR 0.01. In August 2019, an interim dividend of EUR 0.24 per ordinary share was paid. Therefore, a final dividend of EUR 0.45 per ordinary share remains. The final dividend will be paid entirely in cash after ratification of the proposal by the General Meeting of Shareholders.

**Proposed appropriation of result**

| | 2019 |
|---|---|
| Net result | 4,781 |
| Addition to reserves pursuant to Article 37 (4) of the Articles of Association | 2,092 |
| At the disposal of the General Meeting of Shareholders pursuant to Article 37 (5) of the Articles of Association | **2,689** |
| Dividend of EUR 0.69 per ordinary share | |

## 14 Subsequent events

There are no subsequent events to report.

# Authorisation of Parent company financial statements

Amsterdam, 2 March 2020

## The Supervisory Board

G.J. (Hans) Wijers, chairman
H.J.M. (Hermann-Josef) Lamberti, vice-chairman
J.P. (Jan Peter) Balkenende
E.F.C.B. (Eric) Boyer de la Giroday
M. (Mariana) Gheorghe
M. (Margarete) Haase
A.M.G. (Mike) Rees
H.W.P.M.A. (Herna) Verhagen

## The Executive Board

R.A.J.G. (Ralph) Hamers, CEO and chairman
T. (Tanate) Phutrakul, CFO
S.J.A. (Steven) van Rijswijk, CRO

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# Independent auditor's report

To: the Annual General Meeting of Shareholders and the Supervisory Board of ING Groep N.V.

## Report on the audit of the financial statements 2019 included in the annual report

### Our opinion

In our opinion:

— the accompanying consolidated financial statements give a true and fair view of the financial position of ING Groep N.V. as at 31 December 2019 and of its result and its cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (IFRS-EU) and with Part 9 of Book 2 of the Dutch Civil Code;

— the accompanying parent company financial statements give a true and fair view of the financial position of ING Groep N.V. as at 31 December 2019 and of its result for the year then ended in accordance with Part 9 of Book 2 of the Dutch Civil Code.

### What we have audited

We have audited the financial statements 2019 of ING Groep N.V. (the 'Company' or 'ING Group') based in Amsterdam. The financial statements include the consolidated financial statements and the parent company financial statements.

The consolidated financial statements comprise:

1 the consolidated statement of financial position as at 31 December 2019;

2 the following consolidated statements for 2019: the statement of profit or loss, the statements of comprehensive income, changes in equity and cash flows; and

3 the notes comprising a summary of the significant accounting policies and other explanatory information.

The parent company financial statements comprise:

1 the parent company statement of financial position as at 31 December 2019;

2 the parent company statement of profit or loss and statement of changes in equity for 2019; and

3 the notes comprising a summary of the accounting policies and other explanatory information.

### Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of ING Groep N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' ('ViO', Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' ('VGBA', Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Audit approach

#### *Summary*

| Materiality |
|---|
| — Group materiality of EUR 300 million (2018: EUR 300 million).<br>— 4.4% of profit before taxation from continuing operations (2018: 4.4%). |

| Group audit |
|---|
| — 90% of total assets covered by audit procedures performed by component auditors (2018: 90%).<br>— 84% of profit before taxation from continuing operations covered by audit procedures performed by component auditors (2018: 80%). |

| Key Audit Matters |
|---|
| — Assessment of Expected Credit Losses on loans and advances to customers and banks.<br>— Risk of inappropriate access or changes to information technology systems. |

| Opinion |
|---|
| Unqualified |

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### Materiality

Based on our professional judgement, we determined the materiality for the financial statements as a whole at EUR 300 million (2018: EUR 300 million) which represents 4.4% (2018: 4.4%) of profit before taxation from continuing operations. The materiality is determined with reference to the profit before taxation from continuing operations.

We consider profit before taxation from continuing operations as the most appropriate benchmark based on our assessment of the general information needs of users of financial statements and given the fact that ING Group is a profit-oriented entity. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Audit Committee of the Supervisory Board that misstatements in excess of EUR 15 million which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

### Scope of the group audit

ING Group is at the head of a group of components. The financial information of this group is included in the financial statements of ING Group.

ING Group is structured in segments: Retail Netherlands, Retail Belgium, Retail Germany, Retail Other, Wholesale Banking and Corporate Line Banking, covering different countries. Because we are ultimately responsible for the group audit engagement, we are responsible for directing, supervising and performing the group audit. In this respect, we have determined the nature and extent of the audit procedures to be carried out for components. Our group audit is mainly focused on significant components. These components are either individually financially significant due to their relative size compared to ING Group or because we identified a significant risk of material misstatement to one or more account balances of these entities. In addition, we included certain other non-significant components in the scope of our group audit in order to arrive at a sufficient coverage over all relevant significant account balances.

Applying these scoping criteria led to a full or specific scope audit for 40 components globally, in total covering 14 countries. This resulted in a coverage performed by component auditors of 84% of profit before taxation from continuing operations and 90% of total assets. For the remaining 16% of profit before taxation from continuing operations and 10% of total assets, procedures were performed by the group audit team. The consolidation of the ING Group, the disclosures in the financial statements and certain accounting topics that are performed at group level, are audited by the group audit team. Procedures that are performed by the group audit team include, but are not limited to, substantive procedures with respect to equity, goodwill, certain elements of the Expected Credit Loss provisioning process, and analytical procedures in order to corroborate our assessment that the risk of material misstatement in the residual population is less than reasonable possible and scoping remained appropriate throughout the audit.

All components in scope for group reporting are audited by KPMG member firms. We sent detailed instructions to all component auditors, covering significant areas including the relevant significant risks of material misstatement identified at group level, and set out the information required to be reported to the group audit team. We visited component auditors in the Netherlands, Belgium, Germany, United States of America, Italy and Luxembourg, where we performed local audit file reviews. For Australia, we reviewed the file remotely. For all components in scope of the group audit, we held conference calls and/or physical meetings with the auditors of the components. During these visits, meetings and calls, the planning, risk assessment, procedures performed, findings and observations reported to the group auditor were discussed in more detail and any further work deemed necessary by the group audit team was then performed.

The group audit team has set component materiality levels, which ranged from EUR 25 million to EUR 115 million, based on the mix of size and financial statement risk profile of the components within the group to reduce the aggregation risk to an acceptable level.

By performing the procedures mentioned above at group components, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about ING Group's financial information to provide an opinion about the financial statements.

The audit coverage as stated in the section summary can be further specified as follows:

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**Total assets**

90%

Covered by audit procedures performed by component auditors

10%

Covered by procedures performed at group level

**Profit before taxation from continuing operations**

84%

Covered by audit procedures performed by component auditors

16%

Covered by procedures performed at group level

### *Audit scope in relation to fraud*

In accordance with the Dutch standards on auditing, we are responsible for obtaining a high (but not absolute) level of assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error.

As part of our risk assessment process, we have evaluated events or conditions that indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud ('fraud risk factors') to determine whether fraud risks are relevant to our audit. During this risk assessment, we made use of our own forensic specialists.

We communicated identified fraud risks throughout our team and remained alert to any indications of fraud throughout the audit. This included communication from the group to component audit teams of relevant fraud risks identified at group level.

In accordance with the auditing standard, we evaluated the fraud risk. The presumed fraud risk on the revenue recognition was not considered a significant risk to our audit. The other fraud risks that are relevant to our audit, are:

- Fraud risk in relation to management override of controls (a presumed risk).
- Fraud risk in relation to management override of Expected Credit Loss provision results.

Our audit procedures included an evaluation of the design, implementation as well as the operating effectiveness of internal controls relevant to mitigate these risks and substantive audit procedures, including detailed testing of high risk journal entries and evaluation of management bias. These procedures are among others related to the Loan Loss Provision and suspense accounts. In determining the audit procedures, we used the Company's evaluation in relation to fraud risk management (prevention, detections and response), including the set-up of ethical standards to create a culture of honesty.

As part of our evaluation of any instances of fraud, we discussed with management incidents and follow-up by management.

We communicated our risk assessment and audit response to the Executive Board and the Audit Committee of the Supervisory Board. Our audit procedures differ from a specific forensic fraud investigation, which investigation often has a more in-depth character.

Our procedures to address fraud risks did not result in a Key Audit Matter. However, the procedures to address the significant risk described in the Key Audit Matter related to 'Assessment of Expected Credit Losses on loans and advances to customers and banks' also address the fraud risk in relation to management override of Expected Credit Loss provision results.

We do note that our audit is based on the procedures described in line with applicable auditing standards and are not primarily designed to detect fraud.

### *Audit scope in relation to non-compliance with laws and regulations*

We have evaluated facts and circumstances in order to assess laws and regulations relevant to the Company. In this evaluation we made use of our own forensic specialists.

We identified laws and regulations that could reasonably be expected to have a material effect on the financial statements based on our general understanding and sector experience, through discussion with relevant management and evaluating the policies and procedures regarding compliance with laws and regulations.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included communication from the group to component audit teams of relevant laws and regulations identified at group level. The potential effect of these laws and regulations on the financial statements varies considerably:

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- Firstly, the Company is subject to laws and regulations that directly affect the financial statementsincluding taxation and financial reporting (including related company legislation). We assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.
- Secondly, the Company is subject to many other laws and regulations where the consequences of non-compliance could have an indirect material effect on amounts recognised or disclosures provided in the financial statements, or both, for instance through the imposition of fines or litigation.

We identified the following areas as those most likely to have such an indirect effect:

- Anti-money laundering laws and regulations.
- Sanctions laws.

Auditing standards limit the required audit procedures to identify non-compliance with laws and regulations that have an indirect effect to inquiring of relevant management and inspection of regulatory and legal correspondence. Through these procedures, we did not identify any additional actual or suspected non-compliance other than those previously identified by the Company. We considered the effect of actual or suspected non-compliance as part of our procedures on the related financial statement items.

As disclosed in the Executive Board report, ING continued to deliver on the bank-wide Know Your Customer enhancement program (the 'Enhancement program') in order to improve governance, systems and tools around client due diligence and transaction monitoring as disclosed in the Executive Board report. We inquired senior management, ING Group legal counsel, ING Group compliance officer and Head of Internal Audit and inspected the progress reports in relation to the Enhancement program. We also evaluated and discussed internal audit reports in relation to compliance and instructed local auditors of selected components of ING Group to assess the progress of the remediation at component level. We observe that the required Enhancement program receives and will need ongoing attention from management, the Audit Committee and the Supervisory Board.

Our procedures to address compliance with laws and regulations did not result in the identification of a Key Audit Matter.

We do note that our audit is not primarily designed to detect non-compliance with laws and regulations and that management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to errors or fraud, including compliance with laws and regulations.

The more distant non-compliance with indirect laws and regulations (irregularities) is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it. In addition, as with any audit, there remained a higher risk of non-detection of irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

## Our Key Audit Matters

Key Audit Matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the Key Audit Matters to the Audit Committee of the Supervisory Board. The Key Audit Matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The 2018 Key Audit Matter with respect to instances of non-compliance with anti-money laundering and anti-terrorism financing acts is not included, as this specifically relates to the financial year 2018 and previous years.

## Assessment of Expected Credit Losses on loans and advances to customers and banks

### Description

As discussed in section 'Credit Risk' in the Executive Board report, and Note 7 and Note 3 to the consolidated financial statements, the loans and advances to customers and loans and advances to banks amounts are EUR 612 billion and EUR 35 billion, respectively, as at 31 December 2019. These loans and advances are measured at amortised cost, less a provision for Expected Credit Losses ('ECL') of EUR 4.6 billion. Considerable judgement is exercised in determining the amount of ECL for loans and advances to customers and banks assessed on both a collective and an individual basis.

We identified the assessment of ECL on loans and advances to customers and banks as a Key Audit Matter because there was a high degree of estimation uncertainty as a result of complexity of the models, inputs, assumptions and judgements in measuring the ECL. Specifically, assessment of the probability of default ('PD'), the loss given default ('LGD'), and the exposure at default ('EAD'), including expected future recovery cash flows, the use of the macro-economic assumptions in the ECL, and the criteria for identifying significant increase in credit risk ('SICR') required significant and complex management and auditor judgement and knowledge and experience in the industry.

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### Our response

The primary procedures we performed to address this Key Audit Matter, included the following:

- We tested certain internal controls over the Company's ECL process for loans and advances to customers and banks, including controls related to governance and monitoring of the ECL, review of the relevant loan inputs used in the collective provisioning models, determination of risk ratings, and the estimated future recovery cash flows of individual loan provisions. Furthermore, we tested certain internal controls with respect to the assessment of the PD, LGD, and EAD assumptions in credit risk models used to calculate the collective ECL, including the development of macro-economic scenarios, SICR criteria, and review of model outputs.
- We involved professionals with specialised skills and knowledge who assisted in:
  - evaluating the inputs, assumptions and judgements to determine the PD, LGD, and EAD parameters in models used by the Company to calculate the collective provisions;
  - assessing the criteria and thresholds used to identify loans that experienced a significant increase in credit risk.
- With the assistance of Corporate Finance professionals and Real Estate Valuation professionals with specialised skills and knowledge, we assessed the methodologies, cash flows and collateral values used in expected future recovery cash flow assessments of provisions for impaired loans, including the Company's judgements made.
- We involved economic professionals with specialised skills and knowledge to assist in the assessment of the Company's methodology in determining the macro-economic scenarios used in the ECL calculation.

### Our observation

Based on our procedures performed, we found management's overall assessment relating to the valuation of loans and advances to customers and banks within an acceptable range and adequately disclosed in Note 7 and Note 3 to the financial statements respectively.

## Risk of inappropriate access or changes to information technology systems

### Description

ING Group is dependent on its IT environment for the reliability and continuity of its operations and financial reporting. Inappropriate access or changes to an application or infrastructure could impact an automated control and therefore compromise reliability of financial data and continuity of ING Group's operations. ING Group continued to make efforts to improve its IT systems and processes to increase the efficiency and effectiveness of the IT environment and the reliability and continuity of the IT processing as well as to remediate deficiencies identified in the previous year in access and change management areas.

### Our response

Our audit approach depends to a large extent on the effectiveness of automated controls and, therefore, procedures are designed to test among others access and change management controls over IT systems. Given the IT technical characteristics of this part of the audit, IT audit specialists are an integral part of our engagement team.

IT audit specialists assessed the reliability and continuity of the IT environment, when needed for the scope of our audit of the financial statements. We examined the framework of governance over ING Group's IT organisations and the IT general controls, access to programs and data, program changes and IT operations, including compensating controls where those were required.

Our areas of focus related to the change management, logical user access management, cyber security, security event monitoring and segregation of duties controls. Management has put efforts to remediate identified control deficiencies. We tested the design and operating effectiveness of user access and change management controls of the IT systems relevant for financial reporting. For those control deficiencies that were not remediated, we tested compensating controls that were not impacted by ineffective controls. For certain deficiencies during the period of remediation, we substantively assessed the access to determine whether inappropriate access occurred and whether changes made were appropriate.

### Our observation

The combination of the tests of the controls and the substantive tests performed, provided sufficient evidence to enable us to rely on the adequate and continued operation of the IT systems for the purposes of our audit.

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## Report on the other information included in the annual report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information.

Based on the following procedures performed, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements; and
- contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is less than the scope of those performed in our audit of the financial statements.

The Executive Board of the Company is responsible for the preparation of the other information, including the information as required by Part 9 of Book 2 of the Dutch Civil Code.

## Report on other legal and regulatory requirements

### Engagement

We were engaged by the Annual General Meeting of Shareholders as auditor of ING Group on 11 May 2015, as of the audit for the year 2016 and have operated as statutory auditor ever since that financial year.

### No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audits of public-interest entities.

### Services rendered

For the period to which our statutory audit relates, in addition to this audit we have provided agreed-upon procedures and assurance engagements to ING Groep N.V. or its controlled undertakings. These services were rendered for the benefit of external users, largely driven by regulatory compliance.

## Description of responsibilities regarding the financial statements

### Responsibilities of the Executive Board and the Supervisory Board for the financial statements

The Executive Board is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS-EU and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, the Executive Board is responsible for such internal control as the Executive Board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, the Executive Board is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the Executive Board should prepare the financial statements using the going concern basis of accounting unless the Executive Board either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. The Executive Board should disclose events and circumstances that may cast significant doubt on the Company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the Company's financial reporting process.

### Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A further description of our responsibilities for the audit of the financial statements is included in the appendix of this auditor's report. This description forms part of our auditor's report.

Amstelveen, 2 March 2020

KPMG Accountants N.V.
M.A. Hogeboom RA

Appendix:
Description of our responsibilities for the audit of the financial statements

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## Appendix

### Description of our responsibilities for the audit of the financial statements

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included among others:

- identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the risk resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Executive Board;
- concluding on the appropriateness of the Executive Board's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern;
- evaluating the overall presentation, structure and content of the financial statements, including the disclosures; and
- evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We are solely responsible for the opinion and therefore responsible to obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the financial statements. In this respect, we are also responsible for directing, supervising and performing the group audit.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit. In this respect, we also submit an additional report to the Audit Committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audits of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine the Key Audit Matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

# Articles of Association – Appropriation of results

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## Appropriation of results

The result is appropriated pursuant to Article 37 of the Articles of Association of ING Groep N.V. The Company may make distributions to the extent permitted by law after adoption of the financial statements by the Executive and Supervisory Boards. The Executive Board subject to approval of the Supervisory Board, determines what part of the result remaining after application of the provisions of article 37.3 is to be appropriated to reserves and that the remaining part of the result shall be at the disposal of the General Meeting of Shareholders. The General Meeting of the Shareholders, on a motion of the Executive Board with approval of the Supervisory Board may resolve to distribute from the reserves to ordinary shareholders a dividend or other form of distribution to the registered Shareholder on a date determined by the Executive Board and approved by the Supervisory Board.

# Risk factors

Any of the risks described below could have a material adverse effect on the business activities, financial condition, results and prospects of ING. ING may face a number of the risks described below simultaneously and some risks described below may be interdependent. While the risk factors below have been divided into categories, some risk factors could belong in more than one category and investors should carefully consider all of the risk factors set out in this section. Additional risks of which the Company is not presently aware, or that are currently viewed as immaterial, could also affect the business operations of ING and have a material adverse effect on ING's business activities, financial condition, results and prospects. The market price of ING shares or other securities could decline due to any of those risks including the risks described below, and investors could lose all or part of their investments.

## Risks related to financial conditions, market environment and general economic trends

### Because we are a financial services company conducting business on a global basis, our revenues and earnings are affected by the volatility and strength of the economic, business, liquidity, funding and capital markets environments of the various geographic regions in which we conduct business, and an adverse change in any one region could have an impact on our business, results and financial condition.

Because ING is a multinational banking and financial services corporation, with a global presence and serving around 38.4 million customers, corporate clients and financial institutions in over 40 countries, ING's business, results and financial condition may be significantly impacted by turmoil and volatility in the worldwide financial markets or in the particular geographic areas in which we operate. In Retail Banking, our products include savings, payments, investments, loans and mortgages in most of our retail markets. In Wholesale Banking, we provide specialised lending, tailored corporate finance, debt and equity market solutions, payments & cash management and trade and treasury services. As a result, negative developments in financial markets and/or regions in which we operate have in the past had and may in the future have a material adverse impact on our business, results and financial condition, including as a result of the potential consequences listed below.

Factors such as interest rates, securities prices, credit spreads, liquidity spreads, exchange rates, consumer spending, changes in client behaviour, business investment, real estate values and private equity valuations, government spending, inflation or deflation, the volatility and strength of the capital markets, political events and trends, terrorism, pandemics and epidemics (such as COVID-19) or other widespread health emergencies all impact the business and economic environment and, ultimately, our solvency, liquidity and the amount and profitability of business we conduct in a specific geographic region. Certain of these risks are often experienced globally as well as in specific geographic regions and are described in greater detail below under the headings '–Interest rate volatility and other interest rate changes may adversely affect our business, results and financial condition', '–Inflation and deflation may negatively affect our business, results and financial condition', '–Market conditions, including those observed over the past few years and the application of IFRS 9 may increase the risk of loans being impaired and have a negative effect on our results and financial condition' and '–Continued risk of political instability and fiscal uncertainty in Europe and the United States, as well as ongoing volatility in the financial markets and the economy generally have adversely affected, and may continue to adversely affect, our business, results and financial condition'.

In case one or more of the factors mentioned above adversely affects the profitability of our business, this might also result, among other things, in the following:

- reserve and provisions inadequacies, which could ultimately be realised through profit and loss and shareholders' equity;

- the write-down of tax assets impacting net results and/or equity;
- impairment expenses related to goodwill and other intangible assets, impacting net result; and/or
- movements in risk weighted assets for the determination of required capital.

In particular, we are exposed to financial, economic, market and political conditions in the Benelux countries and Germany, from which we derive a significant portion of our revenues in both Retail Banking and Wholesale Banking, and which present risks of economic downturn. Though less material, we also derive substantial revenues in the following geographic regions: Turkey, Eastern Europe (primarily Poland among others), Southern Europe (primarily Spain among others), East Asia (primarily Singapore among others) and Australia which also present risks of economic downturn. In an economic downturn, we expect that higher unemployment, lower family income, lower corporate earnings, higher corporate and private debt defaults, lower business investments and lower consumer spending would adversely affect the demand for banking products, and that ING may need to increase its reserves and provisions, each of which may result in overall lower earnings. Securities prices, real estate values and private equity valuations may also be adversely impacted, and any such losses would be realised through profit and loss and shareholders' equity. We also offer a number of financial products that expose us to risks associated with fluctuations in interest rates, securities prices, corporate and private default rates, the value of real estate assets, exchange rates and credit spreads.

For further information on ING's exposure to particular geographic areas, see Note 35 'Information on geographic areas' to the consolidated financial statements.

### Interest rate volatility and other interest rate changes may adversely affect our business, results and financial condition.

Changes in prevailing interest rates may negatively affect our business, including the level of net interest revenue we earn, and the levels of deposits and the demand for loans. A sustained increase in the inflation rate in our principal markets may also negatively affect our business, results and financial condition. For example, a sustained increase in the inflation rate may result in an increase in nominal market interest rates. A failure to accurately anticipate higher inflation and factor it into our product pricing assumptions may result in mispricing of our products, which could materially and adversely impact our results. On the other hand, recent concerns regarding negative interest rates and the low level of interest rates generally may negatively impact our net interest income, which may have an adverse impact on our profitability.

A prolonged period of low interest rates has resulted in, and may continue to result in:
- lower earnings over time on investments, as reinvestments will earn lower rates;
- increased prepayment or redemption of mortgages and fixed maturity securities in our investment portfolios, as well as increased prepayments of corporate loans. This as borrowers seek to borrow at lower interest rates potentially combined with lower credit spreads. Consequently, we may be required to reinvest the proceeds into assets at lower interest rates;
- lower profitability as the result of a decrease in the spread between client rates earned on assets and client rates paid on savings, current account and other liabilities;
- higher costs for certain derivative instruments that may be used to hedge certain of our product risks;
- lower profitability since we may not be able to fully track the decline in interest rates in our savings rates;
- lower profitability since we may not always be entitled to impose surcharges to customers to compensate for the decline in interest rates;
- lower profitability since we may have to pay a higher premium for the defined contribution scheme in the Netherlands for which the premium paid is dependent on interest rate developments and DNB's methodology for determining the ultimate forward rate;
- lower interest rates may cause asset margins to decrease thereby lowering our results. This may for example be the consequence of increased competition for investments as result of the low rates, thereby driving margins down; and/or

- (depending on the position) a significant collateral posting requirement associated with our interest rate hedge programs, which could materially and adversely affect liquidity and our profitability.

The foregoing impacts have been and may be further amplified in a negative interest rate environment, since we may not be able earn interest on our assets (including reserves), or may be forced to pay negative interest on our assets, while still paying a positive interest or no interest to others to hold our liabilities, resulting in an adverse impact on our credit spread and lowering of our net interest income. Furthermore, in the event that a negative interest rate environment results in ING's depositors being forced to pay a premium to ING to hold cash deposits, some depositors may choose to withdraw their deposits in lieu of making such payments to ING, which would have an adverse effect on our reputation, business, results and financial condition.

Alternatively, any period of rapidly increasing interest rates may result in:
- a decrease in the demand for loans;
- higher interest rates to be paid on debt securities that we have issued or may issue on the financial markets from time to time to finance our operations and on savings, which would increase our interest expenses and reduce our results;
- higher interest rates can lead to lower investments prices reduce the revaluation reserves, thereby lowering IFRS equity and the capital ratios. Also the lower securities value leads to a loss of liquidity generating capacity which needs to be compensated by attracting new liquidity generating capacity which reduces our results;
- prepayment losses if prepayment rates are lower than expected or if interest rates increase too rapidly to adjust the accompanying hedges; and/or
- (depending on the position) a significant collateral posting requirement associated with our interest rate hedge program.

### The default of a major market participant could disrupt the markets and may have an adverse effect on our business, results and financial condition.

Within the financial services industry, the severe distress or default of any one institution (including sovereigns and central counterparties (CCPs)) could lead to defaults by, or the severe distress of, other market participants. While prudential regulation may reduce the probability of a default by a major financial institution, the actual occurrence of such a default could have a material adverse impact on ING. Such distress of, or default by, a major financial institution could disrupt markets or clearance and settlement systems and lead to a chain of defaults by other financial institutions, since the commercial and financial soundness of many financial institutions may be closely related as a result of credit, trading, clearing or other relationships. Even the perceived lack of creditworthiness of a sovereign or a major financial institution (or a default by any such entity) may lead to market-wide liquidity problems and losses or defaults by us or by other institutions. This risk is sometimes referred to as 'systemic risk' and may adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms and exchanges with whom we interact on a daily basis and financial instruments of sovereigns in which we invest. Systemic risk could impact ING directly, by exposing it to material credit losses on transactions with defaulting counterparties or indirectly by significantly reducing the available market liquidity on which ING and its lending customers depend to fund their operations and/or leading to a write down of loans or securities held by ING. Systemic risk could have a material adverse effect on our ability to raise new funding and on our business, results and financial condition. In addition, such distress or failure could impact future product sales as a potential result of reduced confidence in the financial services industry.

### Continued risk of political instability and fiscal uncertainty in Europe and the United States, as well as ongoing volatility in the financial markets and the economy generally have adversely affected, and may continue to adversely affect, our business, results and financial condition.

Our global business and results are materially affected by conditions in the global capital markets and the economy generally. In Europe, there are continuing concerns over weaker economic conditions, as well as concerns in relation to European sovereign debt, the uncertain outcome of the negotiations between the UK and the EU following the Brexit decisions in UK parliament, increasing political instability, levels of unemployment, the availability and cost of credit, credit spreads, and the impact of continued quantitative easing within the Eurozone through bond repurchases and the ECB's targeted longer-term refinancing operation ('TLTRO'). In the United States, political uncertainty, US national debt levels and changes in US trade and foreign investment policies (including tensions with China and Eurozone) may result in adverse economic developments. In addition, geopolitical issues, including with respect to the Middle East, Russia/Ukraine and North Korea may all contribute to adverse developments in the global capital markets and the economy generally.

Adverse developments in the market have included, for example, decreased liquidity, increased price volatility, credit downgrade events, and increased probability of default for fixed income securities. Moreover, there is a risk that an adverse credit event at one or more European sovereign debtors (including a credit rating downgrade or a default) could trigger a broader economic downturn in Europe and elsewhere. In addition, the confluence of these and other factors has resulted in volatile foreign exchange markets. Securities that are less liquid are more difficult to value and may be hard to dispose of. International equity markets have also continued to experience heightened volatility and turmoil, with issuers, including ourselves, that have exposure to the real estate, mortgage, private equity and credit markets particularly affected. These events, market upheavals and continuing risks, including high levels of volatility, have had and may continue to have an adverse effect on our results, in part because we have a large investment portfolio.

There is also continued uncertainty over the long-term outlook for the tax, spending and borrowing policies of the US, the future economic performance of the US within the global economy and any potential future budgetary restrictions in the US, with a potential impact on a future sovereign credit ratings downgrade of the US government, including the rating of US Treasury securities. A downgrade of US Treasury securities could also impact the ratings and perceived creditworthiness of instruments issued, insured or guaranteed by institutions, agencies or instrumentalities directly linked to the US government. US Treasury securities and other US government-linked securities are key assets on the balance sheets of many financial institutions and are widely used as collateral by financial institutions to meet their day-to-day cash flows in the short-term debt market. The impact of any further downgrades to the sovereign credit rating of the US government or a default by the US government on its debt obligations would create broader financial turmoil and uncertainty, which would weigh heavily on the global financial system and could consequently result in a significant adverse impact to the Group's business and operations.

In many cases, the markets for investments and instruments have been and remain illiquid, and issues relating to counterparty credit ratings and other factors have exacerbated pricing and valuation uncertainties. Valuation of such investments and instruments is a complex process involving the consideration of market transactions, pricing models, management judgment and other factors, and is also impacted by external factors, such as underlying mortgage default rates, interest rates, rating agency actions and property valuations. Historically these factors have resulted in, among other things, valuation and impairment issues in connection with our exposures to European sovereign debt and other investments.

Any of these general developments in global financial and political conditions could negatively impact to our business, results and financial condition in future periods.

### The uncertainty surrounding the United Kingdom's withdrawal from the European Union may have adverse effects on our business, results and financial condition.

Although the UK is not a member state of the Eurozone, the departure of the UK from the EU (commonly referred to as 'Brexit') remains a major political and economic event whose consequences are not fully known or understood and may further destabilize the Eurozone. The UK withdrew from the EU on January 31, 2020, though the relationship between the UK and the EU remains uncertain during the ongoing transition period, which largely maintains current arrangements and provides time for the UK and the EU to negotiate the details of their future relationship. The transition period is currently expected to end on December 31, 2020, and, if no agreement is reached, the default scenario would be a non-negotiated Brexit. In the event of a non-negotiated Brexit, the UK will depart the EU with no agreements in place beyond any temporary arrangements which have been or may be put in place by the EU or individual EU Member States, and the UK as part of no-deal contingency efforts and those conferred by mutual membership of the World Trade Organization. Accordingly, there continues to be uncertainty with respect to the process surrounding Brexit and the outcome of the ongoing Brexit negotiations, including any related regulatory changes, and over the future economic relationship between the UK and the rest of the world (including the EU). Any of these developments could have an adverse effect on economic and financial conditions in the UK, the EU or globally. Although ING has continued to take further steps throughout 2019 to prepare for known risks related to Brexit, such as substantially progressing applications for a Third Country Branch banking licence in the UK, taking actions for contract continuity and working to establish alternatives in the EU for those euro clearing activities that may be expected to move from London following Brexit, the possible economic and operational impacts of Brexit on the Group and its counterparties remain uncertain.

Given ING's significant pre-existing EU-licensed banking network and the various scenario analyses performed by ING on its Brexit sensitive clients and sectors, ING believes that it is positioned to largely avoid, or has taken significant steps to mitigate, potential direct adverse effects of Brexit. However, the regulatory impact of Brexit continues to present material risks and uncertainties, particularly as to how regulations may diverge between the EU and the UK, which could materially increase ING's compliance costs and have a material adverse effect on ING's business, results and financial condition.

### Discontinuation of or changes to 'benchmark' indices may negatively affect our business, results and financial condition.

The London Interbank Offered Rate ('LIBOR'), the Euro OverNight Index Average ('EONIA'), the Euro Interbank Offered Rate ('EURIBOR') and other interest rates or other types of rates and indices which are deemed to be 'benchmarks' are the subject of ongoing national and international regulatory reform. Following the implementation of any such potential reforms, the manner of administration of benchmarks may change, with the result that they may perform or be calculated differently than in the past, or benchmarks could cease to exist entirely, or there could be other consequences which cannot be predicted. Although the UK Financial Conduct Authority ('FCA') has authorized ICE Benchmark Administration as administrator of LIBOR, on 27 July 2017 the FCA announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021. The announcement indicates that the continuation of the LIBOR on the current basis cannot and will not be guaranteed after 2021. In addition, as of October 2019, the new euro risk-free rate euro short-term rate (€STR) is being published and the EONIA benchmark was reformed, making it dependant to the €STR benchmark. The reformed EONIA benchmark will cease to exist by 1 January 2022 and therefore the European Money Markets Institute (EONIA's administrator) has indicated that EONIA cannot be used in any contracts that will be outstanding as of 1 January 2022. Public authorities have initiated industry working groups in various jurisdictions to search for and recommend alternative risk-free rates that could serve alternatives if current benchmarks like LIBOR and EONIA cease to exist or materially change. The work of these working groups is still ongoing, though certain such organizations have advanced proposals for benchmark replacements. For example, the US Federal Reserve's Alternative Reference Rates Committee (commonly referred to as 'ARRC') has recommended adoption of the Secured Overnight Financing Rate (commonly referred to as 'SOFR') as an alternative to US dollar LIBOR.

The potential discontinuation of the LIBOR and EONIA benchmarks or any other benchmark, or changes in the methodology or manner of administration of any benchmark, could result in a number of risks for the Group, its clients, and the financial services industry more widely. These risks include legal risks in relation to changes required to documentation for new and existing transactions may be required. Financial risks may also arise from any changes in the valuation of financial instruments linked to benchmark rates, and changes to benchmark indices could impact pricing mechanisms on some instruments. Changes in valuation, methodology or documentation may also result into complaints or litigation. The Group may also be exposed to operational risks or incur additional costs due to the potential requirement to adapt IT systems, trade reporting infrastructure and operational processes, or in relation to communications with clients or other parties and engagement during the transition period.

Except for EONIA, the replacement of benchmarks together with the timetable and mechanisms for implementation have not yet been confirmed by central banks. Accordingly, it is not currently possible to determine whether, or to what extent, any such changes would affect the Group. However, the implementation of alternative benchmark rates may have a material adverse effect on our business, results and financial condition.

### Inflation and deflation may negatively affect our business, results and financial condition.

A sustained increase in the inflation rate in our principal markets would have multiple impacts on us and may negatively affect our business, results and financial condition. For example, a sustained increase in the inflation rate may result in an increase in market interest rates, which may:

- decrease the estimated fair value of certain fixed income securities that we hold in our investment portfolios, resulting in:
  - reduced levels of unrealised capital gains available to us, which could negatively impact our solvency position and net income, and/or
  - a decrease in collateral values,
- result in increased withdrawal of certain savings products, particularly those with fixed rates below market rates,
- require us, as an issuer of securities, to pay higher interest rates on debt securities that we issue in the financial markets from time to time to finance our operations, which would increase our interest expenses and reduce our results.

A significant and sustained increase in inflation has historically also been associated with decreased prices for equity securities and sluggish performance of equity markets generally. A sustained decline in equity markets may:

- result in impairment charges to equity securities that we hold in our investment portfolios and reduced levels of unrealised capital gains available to us which would reduce our net income, and
- lower the value of our equity investments impacting our capital position.

In addition, a failure to accurately anticipate higher inflation and factor it into our product pricing may result in a systemic mispricing of our products, which would negatively impact our results.

On the other hand, deflation experienced in our principal markets may also adversely affect our financial performance. In recent years, the risk of low inflation and even deflation (i.e., a continued period with negative rates of inflation) in the Eurozone has materialized. Deflation may erode collateral values and diminish the quality of loans and cause a decrease in borrowing levels, which would negatively affect our business and results.

### Market conditions, including those observed over the past few years, and the application of IFRS 9 may increase the risk of loans being impaired and have a negative effect on our results and financial condition.

We are exposed to the risk that our borrowers (including sovereigns) may not repay their loans according to their contractual terms and that the collateral securing the payment of these loans may be insufficient. We may see adverse changes in the credit quality of our borrowers and counterparties, for example, as a result of their inability to refinance their indebtedness, with increasing delinquencies, defaults and insolvencies across a range of sectors. This may lead to impairment charges on loans and other assets, higher costs and additions to loan loss provisions. A significant increase in the size of our provision for loan losses could have a material adverse effect on our business, results and financial condition.

IFRS 9 ‘Financial Instruments’ became effective as per 1 January 2018 and results in loan loss provisions that may be recognized earlier, on a more forward looking basis and on a broader scope of financial instruments than was previously the case under IAS 39. ING has applied the classification, measurement, and impairment requirements retrospectively by adjusting the opening balance sheet and opening equity as at 1 January 2018. As a result of applying IFRS 9 going forward, a shift in the forward looking consensus view of economic conditions may materially impact the models used to calculate loan loss provisions under IFRS 9 and cause more volatility in, or higher levels of, loan loss provisions, any of which could adversely affect the Group's results, financial condition or regulatory capital position.

Economic and other factors could lead to contraction in the residential mortgage and commercial lending market and to decreases in residential and commercial property prices, which could generate substantial increases in impairment losses. Additionally, continuing low oil prices could have an influence on the repayment capacity of certain corporate borrowers active in the oil and oil related services industries.

### We may incur losses due to failures of banks falling under the scope of state compensation schemes.

While prudential regulation is intended to minimize the risk of bank failures, in the event such a failure occurs, given our size, we may incur significant compensation payments to be made under the Dutch Deposit Guarantee Scheme (DGS), which we may be unable to recover from the bankrupt estate, and therefore the consequences of any future failure of such a bank could be significant to ING. Such costs and the associated costs to be borne by us may have a material adverse effect on our results and financial condition. On the basis of the EU Directive on deposit guarantee schemes, ING pays quarterly risk-weighted contributions into a DGS-fund. The DGS-fund is to grow to a target size of 0.8% of all deposits guaranteed under the DGS, which is expected to be reached in July 2024. In case of failure of a Dutch bank, depositor compensation is paid from the DGS-fund. If the available financial means of the fund are insufficient, Dutch banks, including ING, may be required pay to extraordinary ex-post contributions not exceeding 0.5% of their covered deposits per calendar year. In exceptional circumstances and with the consent of the competent authority, higher contributions may be required. However, extraordinary ex-post contributions may be temporarily deferred if, and for so long as, they would jeopardise the solvency or liquidity of a bank. Depending on the size of the failed bank, the available financial means in the fund, and the required additional financial means, the impact of the extraordinary ex-post contributions on ING may be material.

Since 2015, the EU has been discussing the introduction of a pan-European deposit guarantee scheme ('EDIS'), (partly) replacing or complementing national compensation schemes in two or three phases. Proposals contain elements of (re)insurance, mutual lending and mutualisation of funds. The new model is intended to be 'overall cost-neutral'. Discussions have continued in 2019, but it remains uncertain when EDIS will be introduced and, if introduced, what impact EDIS would have on ING's business and operations.

## Risks related to the regulation and supervision of the Group

### Non-compliance with laws and/or regulations concerning financial services or financial institutions could result in fines and other liabilities, penalties or consequences for us, which could materially affect our business and reduce our profitability.

Despite our efforts to maintain effective compliance procedures and to comply with applicable laws and regulations, we have faced, and in the future may continue to face, the risk of consequences in connection with non-compliance with applicable laws and regulations. For additional information on legal proceedings, see Note 47 'Legal proceedings' to the consolidated financial statements. There are a number of risks in areas where applicable regulations may be unclear, subject to multiple interpretations or under development, or where regulations may conflict with one another, or where regulators revise their previous guidance or courts overturn previous rulings, which could result in our failure to meet applicable standards. Regulators and other authorities have the power to bring administrative or judicial proceedings against us, which could result, among other things, in suspension or revocation of our licenses, cease and desist orders, fines, civil penalties, criminal penalties or other disciplinary action, which could materially harm our results and financial condition. If we fail to address, or appear to fail to address, any of these matters appropriately, our reputation could be harmed and we could be subject to additional legal risk, which could, in turn, increase the size and number of claims and damages brought against us or subject us to enforcement actions, fines and penalties.

### Changes in laws and/or regulations governing financial services or financial institutions or the application of such laws and/or regulations may increase our operating costs and limit our activities.

We are subject to detailed banking laws and government regulation in the jurisdictions in which we conduct business.  Regulation of the industries in which we operate is becoming increasingly more extensive and complex, while also attracting scrutiny from regulators. Compliance with applicable and new laws and regulations is resources-intensive, and may materially increase our operating costs. Moreover, these regulations can limit our activities, among others, through stricter net capital, customer protection and market conduct requirements and restrictions on the businesses in which we can operate or invest.

Our revenues and profitability and those of our competitors have been and will continue to be impacted by requirements relating to capital, additional loss-absorbing capacity, leverage, minimum liquidity and long-term funding levels, requirements related to resolution and recovery planning, derivatives clearing and margin rules and levels of regulatory oversight, as well as limitations on which and, if permitted, how certain business activities may be carried out by financial institutions.

### We are subject to additional legal and regulatory risk in certain countries where we operate with less developed or predictable legal and regulatory frameworks.

In certain countries in which we operate, judiciary and dispute resolution systems may be less developed. As a result, in case of a breach of contract, we may have difficulties in making and enforcing claims against contractual counterparties and, if claims are made against us, we might encounter difficulties in mounting a defence against such allegations. If we become party to legal proceedings in a market with an insufficiently developed judicial system, it could have an adverse effect on our operations and net results.

In addition, as a result of our operations in certain countries, we are subject to risks of possible nationalisation, expropriation, price controls, exchange controls and other restrictive government actions, as well as the outbreak of hostilities and or war, in these markets. Furthermore, the current economic environment in certain countries in which we operate may increase the likelihood for regulatory initiatives to enhance consumer protection or to protect homeowners from foreclosures. Any such regulatory initiative could have an adverse impact on our ability to protect our economic interest, for instance in the event of defaults on residential mortgages.

### We are subject to the regulatory supervision of the ECB and other regulators with extensive supervisory and investigatory powers.

In its capacity as principal bank supervisor in the EU, the ECB has extensive supervisory and investigatory powers, including the ability to issue requests for information, to conduct regulatory investigations and on-site inspections, and to impose monetary and other sanctions. For example, under the SSM, the regulators with jurisdiction over the Group, including the ECB, may conduct stress tests and have discretion to impose capital surcharges on financial institutions for risks that are not otherwise recognised in risk-weighted assets or other surcharges depending on the individual situation of the bank and take or require other measures, such as restrictions on or changes to the Group's business. Competent regulators may also, if the Group fails to comply with regulatory requirements, in particular with minimum capital requirements (including buffer requirements) or with liquidity requirements, or if there are shortcomings in its governance and risk management processes, prohibit the Group from making dividend payments to shareholders or distributions to holders of its regulatory capital instruments. Generally, a failure to comply with the new quantitative and qualitative regulatory requirements could have a material adverse effect on the Group's business, results and financial condition.

### Failure to meet minimum capital and other prudential regulatory requirements as applicable to us from time to time may have a material adverse effect on our business, results and financial condition and on our ability to make payments on certain of our securities.

We are subject to regulations that require us to comply with minimum requirements for capital (own funds) and additional loss absorbing capacity, as well as for liquidity, and to comply with leverage restrictions. These are developed or enacted by various organisations such as the Basel Committee on Banking Supervision ('BCBS'), the Financial Stability Board ('FSB') and the European Union ('EU'). The main pieces of legislation in this field that apply to us are the EU's Capital Requirements Directive ('CRD') and Capital Requirements Regulation ('CRR'), and the Bank Recovery and Resolution Directive, all as amended from time to time and as implemented in national law where required.

The capital and liquidity requirements and leverage restrictions that apply to us result in various minimum capital ratios (of capital to risk-weighted assets) and liquidity ratios that we must maintain, and in a minimum leverage ratio (based on unweighted assets). A key capital ratio is the Common Equity Tier 1 ratio or CET1 ratio, which is the ratio of common equity tier 1 capital to the total risk exposure amount ('TREA', often referred to as risk-weighted assets or 'RWA'). In addition to the capital requirements, we must maintain at all times a sufficient aggregate amount of own funds and 'eligible liabilities' (that is, liabilities that may be bailed in using the bail-in tool), known as the minimum requirements for own funds and eligible liabilities ('MREL').

Capital, liquidity and leverage requirements and their application and interpretation may change. Any changes may require us to maintain more capital or to raise a different type of capital by disqualifying existing capital instruments from continued inclusion in regulatory capital, requiring replacement with new capital instruments that meet the new criteria. Sometimes changes are introduced subject to a transitional period during which the new requirements are being phased in, gradually progressing to a fully phased-in, or fully-loaded, application of the requirements.

Any failure to comply with these requirements may have a material adverse effect on our business, results and financial condition, and may require us to seek additional capital. It may also prohibit us from making payments on certain of our securities. Our business, results and financial condition may also be adversely affected if these requirements change, which may also require us to seek additional capital or a different type of capital. Because implementation phases and transposition into EU or national regulation where required may often involve a lengthy period, the impact of changes in capital, liquidity and leverage regulations on our business, results and financial condition, and on our ability to make payments on certain of our securities, is often unclear.

### Our US commodities and derivatives business is subject to CFTC and SEC regulation under the Dodd-Frank Act.

Title VII of Dodd-Frank created a new framework for regulation of the over-the-counter derivatives markets and certain market participants which has affected and could continue to affect various activities of the Group and its subsidiaries. ING Capital Markets LLC, a wholly-owned indirect subsidiary of ING Bank N.V., has registered with the US Commodity Futures Trading Commission ('CFTC') as a swap dealer and intends to register with the SEC as a securities-based swap dealer. The SEC has adopted regulations, among others, establishing registration, reporting, risk management, business conduct, and margin and capital requirements for security-based swaps. Such regulations are expected to be effective on or around September 1, 2021.Additionally, the CFTC recently re-proposed, and is expected to adopt, capital requirements for swap dealers, although the specific requirements, and any available exemptions, have not been finalized. If these requirements are applicable to ING, and no exemptions are available, it is possible that these requirements will be difficult for ING to comply with and may, as a result, materially and adversely impact ING's ability to operate as a swap dealer in the US. Other CFTC regulatory requirements, already implemented, include registration of swap dealers, business conduct rules imposed on swap dealers, requirements that some categories of swaps be centrally executed on regulated trading facilities and cleared through regulated clearing houses, and initial and variation margin requirements for uncleared swaps. In addition, new position limits requirements for market participants that have been proposed and may be contained in final regulations to be adopted by the CFTC could limit ING's position sizes in swaps referencing specified physical commodities and similarly limit the ability of counterparties to utilize certain of our products by narrowing the scope of hedging exemptions from position limits for commercial end users and the trading activity of speculators. All of the foregoing areas of regulation of the derivative markets and market participants will likely result in increased cost of hedging and other trading activities, both for ING and its customers, which could expose our business to greater risk and could reduce the size and profitability of our customer business. In addition, the imposition of these regulatory restrictions and requirements, could result in reduced market liquidity, which could in turn increase market volatility and the risks and costs of hedging and other trading activities.

### We are subject to the 'Bank Recovery and Resolution Directive' ('BRRD') among several other bank recovery and resolution regimes that include statutory write down and conversion as well as other powers, which remains subject to significant uncertainties as to scope and impact on us.

We are subject to several recovery and resolution regimes, including the Single Resolution Mechanism ('SRM'), the BRRD as implemented in national legislation, and the Dutch 'Intervention Act' (Wet bijzondere maatregelen financiële ondernemingen. as implemented in the Dutch Financial Supervision Act). The aim of the BRRD is to provide supervisory authorities and resolution authorities with common tools and powers to address banking crises pre-emptively in order to safeguard financial stability and minimise taxpayers' exposure to losses.

The powers granted to authorities include, among others, a statutory 'write-down and conversion power' and a 'bail-in' power, which gives the resolution authority the power to, as a resolution action or when the resolution authority determines that otherwise we would no longer be viable, inter alia, (i) reduce or cancel existing shares, (ii) convert relevant capital instruments or eligible liabilities or bail-inable liabilities into shares or other instruments of ownership of the relevant entity and/or (iii) write down relevant capital instruments or eligible liabilities or reduce or cancel the principal amount of, or interest on, certain unsecured liabilities (which could include certain securities that have been or will be issued by us), whether in whole or in part and whether or not on a permanent basis.

In addition to the 'write-down and conversion power' and the 'bail-in' power, the powers granted to the resolution authority include the power to (i) sell and transfer a banking group or all or part of its business on commercial terms without requiring the consent of the shareholders or complying with the procedural requirements that would otherwise apply, (ii) transfer a banking group or all or part of its business to a 'bridge institution' (a publicly controlled entity) and (iii) separate and transfer all or part of a banking group's business to an asset management vehicle (a publicly controlled entity) to allow them to be managed over time.

In addition, among the broader powers granted to the resolution authority, the BRRD provides powers to the resolution authority to amend the maturity date and/or any interest payment date of, or the interest amount payable under, debt instruments or other bail-inable liabilities, including by suspending payment for a temporary period.

The Intervention Act confers wide-ranging powers to the Dutch Minister of Finance, including, among other things, in relation to shares and other securities issued by us or with our cooperation or other claims on us (including, without limitation, expropriation thereof) if there is a grave and immediate threat to the stability of the financial system.

None of these actions would be expected to constitute an event of default under our securities entitling holders to seek repayment. If these powers were to be exercised in respect of us, there could be a material adverse effect on us and on holders of our securities, including through a material adverse effect on credit ratings and/or the price of our securities. Investors in our securities may lose their investment if resolution measures are taken under current or future regimes.

## Risks related to changes in laws of general application, litigation, enforcement proceedings and investigations

### We may be subject to litigation, enforcement proceedings, investigations or other regulatory actions, and adverse publicity.

We are involved in governmental, regulatory, arbitration and legal proceedings and investigations involving claims by and against us which arise in the ordinary course of our businesses, including in connection with our activities as financial services provider, employer, investor and taxpayer. As a financial institution, we are subject to specific laws and regulations governing financial services or financial institutions. See '– Changes in laws and/or regulations governing financial services or financial institutions or the application of such laws and/or regulations may increase our operating costs and limit our activities' above. Financial reporting irregularities involving other large and well-known companies, possible findings of government authorities in various jurisdictions which are investigating several rate-setting processes, notifications made by whistleblowers, increasing regulatory and law enforcement scrutiny of 'know your customer' anti-money laundering, tax evasion, prohibited transactions with countries or persons subject to sanctions, and bribery or other anti-corruption measures and anti-terrorist-financing procedures and their effectiveness, regulatory investigations of the banking industry, and litigation that arises from the failure or perceived failure by us to comply with legal, regulatory, tax and compliance requirements could result in adverse publicity and reputational harm, lead to increased regulatory supervision, affect our ability to attract and retain customers and maintain access to the capital markets, result in cease and desist orders, claims, enforcement actions, fines and civil and criminal penalties, other disciplinary action or have other material adverse effects on us in ways that are not predictable. Some claims and allegations may be brought by or on behalf of a class and claimants may seek large or indeterminate amounts of damages, including compensatory, liquidated, treble and punitive damages. Our reserves for litigation liabilities may prove to be inadequate. Claims and allegations, should they become public, need not be well founded, true or successful to have a negative impact on our reputation. In addition, press reports and other public statements that assert some form of wrongdoing could result in inquiries or investigations by regulators, legislators and law enforcement officials, and responding to these inquiries and investigations, regardless of their ultimate outcome, is time consuming and expensive. Adverse publicity, claims and allegations, litigation and regulatory investigations and sanctions may have a material adverse effect on our business, results, financial condition and/or prospects in any given period.

### We are subject to different tax regulations in each of the jurisdictions where we conduct business, and are exposed to changes in tax laws, and risks of non-compliance with or proceedings or investigations with respect to, tax laws.

Changes in tax laws (including case law) could increase our taxes and our effective tax rates and could materially impact our tax receivables and liabilities as well as deferred tax assets and deferred tax liabilities, which could have a material adverse effect on our business, results and financial condition. Changes in tax laws could also make certain ING products less attractive, which could have adverse consequences for our businesses and results. Because of the geographic spread of its business, ING may be subject to tax audits, investigations and procedures in numerous jurisdictions at any point in time. Although we believe that we have adequately provided for all our tax positions, the ultimate resolution of these audits, investigations and procedures may result in liabilities which are different from the amounts recognized.

Increased bank taxes in countries where the Group is active result in increased taxes on ING's banking operations, which could negatively impact our operations, financial condition and liquidity.

### We may be subject to withholding tax if we fail to comply with the Foreign Account Tax Compliance Act and other US withholding tax regulations

Under provisions of US tax law commonly referred to as FATCA, non-US financial institutions are required to provide to the US Internal Revenue Service ('IRS') certain information about financial accounts held by US taxpayers or by foreign entities in which US taxpayers hold a substantial ownership interest. Every three years, certain ING branches and subsidiaries are required to certify their compliance with FATCA requirements to the IRS. If the IRS determines that any such branches and/or subsidiaries are not in compliance with the FATCA requirements, then the FATCA regulations would impose a 30 percent penalty tax on all US-source payments (e.g., interest and dividends) made to the branch/subsidiary, regardless of whether the branch/subsidiary is the beneficial owner of such payment or is acting as an intermediary for customers/payees.

Under provisions of other US tax law concerning withholding tax, non-US financial institutions acting as intermediaries are required to withhold tax on US-source payments to payees and remit the tax to the IRS. Every three years, certain ING branches and subsidiaries are required to certify their compliance with such Qualified Intermediary ('QI') requirements to the IRS. If the IRS determines that any such branches and/or subsidiaries are not in compliance with the QI requirements, then it would not be commercially feasible for ING to offer certain products to customers.

Failure to comply with FATCA and/or QI requirements and regulations could also harm our reputation and could subject the Group to enforcement actions, fines and penalties, which could have a material adverse effect on our business, reputation, revenues, results, financial condition and prospects. For additional information with respect to specific proceedings, see Note 47 'Legal proceedings' to the consolidated financial statements.

### ING is exposed to the risk of claims from customers who feel misled or treated unfairly because of advice or information received.

Our banking products and advice services for third-party products are exposed to claims from customers who might allege that they have received misleading advice or other information from advisers (both internal and external) as to which products were most appropriate for them, or that the terms and conditions of the products, the nature of the products or the circumstances under which the products were sold, were misrepresented to them. When new financial products are brought to the market, ING engages in a multidisciplinary product approval process in connection with the development of such products, including production of appropriate marketing and communication materials. Notwithstanding these processes, customers may make claims against ING if the products do not meet their expectations. Customer protection regulations, as well as changes in interpretation and perception by both the public at large and governmental authorities of acceptable market practices, influence customer expectations.

Products distributed through person-to-person sales forces have a higher exposure to such claims as the sales forces provide face-to-face financial planning and advisory services. Complaints may also arise if customers feel that they have not been treated reasonably or fairly, or that the duty of care has not been complied with. While a considerable amount of time and resources have been invested in reviewing and assessing historical sales practices and products that were sold in the past, and in the maintenance of risk management, legal and compliance procedures to monitor current sales practices, there can be no assurance that all of the issues associated with current and historical sales practices have been or will be identified, nor that any issues already identified will not be more widespread than presently estimated.

The negative publicity associated with any sales practices, any compensation payable in respect of any such issues and regulatory changes resulting from such issues, has had and could have a material adverse effect on our reputation, business, results, financial condition and prospects. For additional information regarding legal proceedings or claims, see Note 47 'Legal proceedings' to the consolidated financial statements.

## Risks related to the Group's business and operations

### Operational risks, such as systems disruptions or failures, breaches of security, cyber attacks, human error, changes in operational practices, inadequate controls including in respect of third parties with which we do business, natural disasters or outbreaks of communicable diseases may adversely impact our reputation, business and results.

We face the risk that the design and operating effectiveness of our controls and procedures may prove to be inadequate. Operational risks are inherent to our business. Our businesses depend on the ability to process a large number of transactions efficiently and accurately. In addition, we routinely transmit, receive and store personal, confidential and proprietary information by email and other electronic means. Although we endeavour to safeguard our systems and processes, losses can result from inadequately trained or skilled personnel, IT failures (including due to a computer virus or a failure to anticipate or prevent cyberattacks or other attempts to gain unauthorised access to digital systems for purposes of misappropriating assets or sensitive information, corrupting data, or impairing operational performance, or security breaches by third parties), inadequate or failed internal control processes and systems, regulatory breaches, human errors, employee misconduct, including fraud, or from natural disasters or other external events that interrupt normal business operations. Such losses may adversely affect our reputation, business and results. We depend on the secure processing, storage and transmission of confidential and other information in our computer systems and networks. The equipment and software used in our computer systems and networks may not always be capable of processing, storing or transmitting information as expected. Despite our business continuity plans and procedures, certain of our computer systems and networks may have insufficient recovery capabilities in the event of a malfunction or loss of data. As part of our Accelerated Think Forward strategy, we are consistently managing and monitoring our IT risk profile globally. ING is subject to increasing regulatory requirements including EU General Data Protection Regulation ('GDPR') and EU Payment Services Directive ('PSD2'). Failure to appropriately manage and monitor our IT risk profile could affect our ability to comply with these regulatory requirements, to securely and efficiently serve our clients or to timely, completely or accurately process, store and transmit information, and may adversely impact our reputation, business and results. For further description of the particular risks associated with cybercrime, see '–We are subject to increasing risks related to cybercrime and compliance with cybersecurity regulation' below.

Widespread outbreaks of communicable diseases may impact the health of our employees, increasing absenteeism, or may cause a significant increase in the utilisation of health benefits offered to our employees, either or both of which could adversely impact our business. We also face physical risks, including as a direct result of climate change, such as extreme weather events or rising water levels, which could have a material adverse effect on our operations, particularly where our headquarters may be impacted. In addition, other events including unforeseeable and/or catastrophic events can lead to an abrupt interruption of activities, and our operations may be subject to losses resulting from such disruptions. Losses can result from destruction or impairment of property, financial assets, trading positions, and the loss of key personnel. If our business continuity plans are not able to be implemented, are not effective or do not sufficiently take such events into account, losses may increase further.

### We are subject to increasing risks related to cybercrime and compliance with cybersecurity regulation.

Like other financial institutions and global companies, we are regularly the target of cyberattacks. In particular, threats from Distributed Denial of Service ('DDoS'), targeted attacks (also called Advanced Persistent Threats) and Ransomware intensify worldwide, and attempts to gain unauthorised access and the techniques used for such attacks are increasingly sophisticated. We have faced, and expect to continue to face, an increasing number of cyberattacks (both successful and unsuccessful) as we have further digitalized. This includes the continuing expansion of our mobile- and other internet-based products and services, as well as our usage and reliance on cloud technology. In 2019 we experienced continuous DDoS attacks, of which one DDoS attack breached our DDoS defences (compared to two attacks in 2018). This DDoS attack caused an outage of approximately four-hours, which affected customers of ING in Romania. In addition, ING Philippines experienced one virus infection on a vendor-supplied server for two hours, which had no customer impact. Furthermore, due to our reliance on national critical infrastructure and interconnectivity with third-party vendors, exchanges, clearing houses, financial institutions and other third parties, we could be adversely impacted if any of them is subject to a successful cyberattack or other information security event.

Cybersecurity, customer data and data privacy have become the subject of increasing legislative and regulatory focus. The EU's second Payment Services Directive ('PSD2'), implemented in 2019, and GDPR are examples of such regulations. In certain locations where ING is active, there are additional local regulatory requirements and legislation on top of EU regulations that must be followed for business conducted in that jurisdiction. Some of these legislations and regulations may be conflicting due to local regulatory interpretations. We may become subject to new EU and local legislation or regulation concerning cybersecurity, security of customer data in general or the privacy of information we may store or maintain. Compliance with such new legislation or regulation could increase the Group's compliance cost. Failure to comply with new and existing legislation or regulation could harm our reputation and could subject the Group to enforcement actions, fines and penalties.

ING may be exposed to the risks of misappropriation, unauthorised access, computer viruses or other malicious code, cyberattacks and other external attacks or internal breaches that could have a security impact. These events could also jeopardise our confidential information or that of our clients or our counterparties and this could be exacerbated by the increase in data protection requirements as a result of GDPR. These events can potentially result in financial loss and harm to our reputation, hinder our operational effectiveness, result in regulatory censure, compensation costs or fines resulting from regulatory investigations and could have a material adverse effect on our business, reputation, revenues, results, financial condition and prospects. Even when we are successful in defending against cyberattacks, such defence may consume significant resources or impose significant additional costs on ING.

### Because we operate in highly competitive markets, including our home market, we may not be able to increase or maintain our market share, which may have an adverse effect on our results.

There is substantial competition in the Netherlands and the other countries in which we do business for the types of wholesale banking, retail banking, investment banking and other products and services we provide. Customer loyalty and retention can be influenced by a number of factors, including brand recognition, reputation, relative service levels, the prices and attributes of products and services, scope of distribution, credit ratings and actions taken by existing or new competitors (including non-bank or financial technology competitors). A decline in our competitive position as to one or more of these factors could adversely impact our ability to maintain or further increase our market share, which would adversely affect our results. Such competition is most pronounced in our more mature markets of the Netherlands, Belgium, the rest of Western Europe and Australia. In recent years, however, competition in emerging markets, such as Latin America, Asia and Central and Eastern Europe, has also increased as large financial services companies from more developed countries have sought to establish themselves in markets which are perceived to offer higher growth potential, and as local institutions have become more sophisticated and competitive and proceeded to form alliances, mergers or strategic relationships with our competitors. The Netherlands is our largest market. Our main competitors in the banking sector in the Netherlands are ABN AMRO Bank and Rabobank.

Competition could also increase due to new entrants (including non-bank and financial technology competitors) in the markets that may have new operating models that are not burdened by potentially costly legacy operations and that are subject to reduced regulation. New entrants may rely on new technologies, advanced data and analytic tools, lower cost to serve, reduced regulatory burden and/or faster processes in order to challenge traditional banks. Developments in technology has also accelerated the use of new business models, and ING may not be successful in adapting to this pace of change or may incur significant costs in adapting its business and operations to meet such changes. For example, new business models have been observed in retail payments, consumer and commercial lending (such as peer-to-peer lending), foreign exchange and low-cost investment advisory services. In particular, the emergence of disintermediation in the financial sector resulting from new banking, lending and payment solutions offered by rapidly evolving incumbents, challengers and new entrants, in particular with respect to payment services and products, and the introduction of disruptive technology may impede our ability to grow or retain our market share and impact our revenues and profitability.

Increasing competition in the markets in which we operate (including from non-banks and financial technology competitors) may significantly impact our results if we are unable to match the products and services offered by our competitors. Future economic turmoil may accelerate additional consolidation activity. Over time, certain sectors of the financial services industry have become more concentrated, as institutions involved in a broad range of financial services have been acquired by or merged into other firms or have declared bankruptcy. These developments could result in our competitors gaining greater access to capital and liquidity, expanding their ranges of products and services, or gaining geographic diversity. We may experience pricing pressures as a result of these factors in the event that some of our competitors seek to increase market share by reducing prices.

### We may not always be able to protect our intellectual property developed in our products and services and may be subject to infringement claims, which could adversely impact our core business, inhibit efforts to monetize our internal innovations and restrict our ability to capitalize on future opportunities.

In the conduct of our business, we rely on a combination of contractual rights with third parties and copyright, trademark, trade name, patent and trade secret laws to establish and protect our intellectual property, which we develop in connection with our products and services. Third parties may infringe or misappropriate our intellectual property. We may have to litigate to enforce and protect our copyrights, trademarks, trade names, patents, trade secrets and know-how or to determine their scope, validity or enforceability. In that event, we may be required to incur significant costs, and our efforts may not prove successful. The inability to secure or protect our intellectual property assets could have an adverse effect on our core business and our ability to compete, including through the monetization of our internal innovations.

We may also be subject to claims made by third parties for (1) patent, trademark or copyright infringement, (2) breach of copyright, trademark or licence usage rights, or (3) misappropriation of trade secrets. Any such claims and any resulting litigation could result in significant expense and liability for damages. If we were found to have infringed or misappropriated a third-party patent or other intellectual property right, we could in some circumstances be enjoined from providing certain products or services to our customers or from utilizing and benefiting from certain methods, processes, copyrights, trademarks, trade secrets or licences. Alternatively, we could be required to enter into costly licensing arrangements with third parties or to implement a costly workaround. Any of these scenarios could have a material adverse effect on our business and results and could restrict our ability to pursue future business opportunities.

### The inability of counterparties to meet their financial obligations or our inability to fully enforce our rights against counterparties could have a material adverse effect on our results.

Third parties that owe us money, securities or other assets may not pay or perform under their obligations. These parties include the issuers and guarantors (including sovereigns) of securities we hold, borrowers under loans originated, reinsurers, customers, trading counterparties, securities lending and repurchase counterparties, counterparties under swaps, credit default and other derivative contracts, clearing agents, exchanges, clearing houses and other financial intermediaries. Defaults by one or more of these parties on their obligations to us due to bankruptcy, lack of liquidity, downturns in the economy or real estate values, continuing low oil or other commodity prices, operational failure or other factors, or even rumours about potential defaults by one or more of these parties or regarding a severe distress of the financial services industry generally, could have a material adverse effect on our results, financial condition and liquidity. Given the high level of interdependence between financial institutions, we are and will continue to be subject to the risk of deterioration of the commercial and financial soundness, or perceived soundness, of sovereigns and other financial services institutions. This is particularly relevant to our franchise as an important and large counterparty in equity, fixed income and foreign exchange markets, including related derivatives.

We routinely execute a high volume of transactions, such as unsecured debt instruments, derivative transactions and equity investments with counterparties and customers in the financial services industry, including brokers and dealers, commercial and investment banks, mutual and hedge funds, insurance companies, institutional clients, futures clearing merchants, swap dealers, and other institutions, resulting in large periodic settlement amounts, which may result in our having significant credit exposure to one or more of such counterparties or customers. As a result, we could face concentration risk with respect to liabilities or amounts we expect to collect from specific counterparties and customers. We are exposed to increased counterparty risk as a result of recent financial institution failures and weakness and will continue to be exposed to the risk of loss if counterparty financial institutions fail or are otherwise unable to meet their obligations. A default by, or even concerns about the creditworthiness of, one or more of these counterparties or customers or other financial services institutions could therefore have an adverse effect on our results or liquidity.

With respect to secured transactions, our credit risk may be exacerbated when the collateral held by us cannot be or is liquidated at prices not sufficient to recover the full amount of the loan or derivative exposure due to us. We also have exposure to a number of financial institutions in the form of unsecured debt instruments, derivative transactions and equity investments. For example, we hold certain hybrid regulatory capital instruments issued by financial institutions which permit the issuer to cancel coupon payments on the occurrence of certain events or at their option. The EC has indicated that, in certain circumstances, it may require these financial institutions to cancel payment. If this were to happen, we expect that such instruments may experience ratings downgrades and/or a drop in value and we may have to treat them as impaired, which could result in significant losses. There is no assurance that losses on, or impairments to the carrying value of, these assets would not materially and adversely affect our business, results or financial condition.

In addition, we are subject to the risk that our rights against third parties may not be enforceable in all circumstances. The deterioration or perceived deterioration in the credit quality of third parties whose securities or obligations we hold could result in losses and/ or adversely affect our ability to rehypothecate or otherwise use those securities or obligations for liquidity purposes. A significant downgrade in the credit ratings of our counterparties could also have a negative impact on our income and risk weighting, leading to increased capital requirements. While in many cases we are permitted to require additional collateral from counterparties that experience financial difficulty, disputes may arise as to the amount of collateral we are entitled to receive and the value of pledged assets. Also in this case, our credit risk may also be exacerbated when the collateral we hold cannot be liquidated at prices sufficient to recover the full amount of the loan or derivative exposure due to us, which is most likely to occur during periods of illiquidity and depressed asset valuations, such as those experienced during the financial crisis of 2008. The termination of contracts and the foreclosure on collateral may subject us to claims. Bankruptcies, downgrades and disputes with counterparties as to the valuation of collateral tend to increase in times of market stress and illiquidity. Any of these developments or losses could materially and adversely affect our business, results, financial condition, and/or prospects.

### Ratings are important to our business for a number of reasons, and a downgrade or a potential downgrade in our credit ratings could have an adverse impact on our results and net results.

Credit ratings represent the opinions of rating agencies regarding an entity's ability to repay its indebtedness. Our credit ratings are important to our ability to raise capital and funding through the issuance of debt and to the cost of such financing. In the event of a downgrade, the cost of issuing debt will increase, having an adverse effect on our net results. Certain institutional investors may also be obliged to withdraw their deposits from ING following a downgrade, which could have an adverse effect on our liquidity. We have credit ratings from S&P, Moody's Investor Service and Fitch Ratings. Each of the rating agencies reviews its ratings and rating methodologies on a recurring basis and may decide on a downgrade at any time.

Furthermore, ING Bank's assets are risk-weighted. Downgrades of these assets could result in a higher risk-weighting, which may result in higher capital requirements. This may impact net earnings and the return on capital, and may have an adverse impact on our competitive position.

As rating agencies continue to evaluate the financial services industry, it is possible that rating agencies will heighten the level of scrutiny that they apply to financial institutions, increase the frequency and scope of their credit reviews, request additional information from the companies that they rate and potentially adjust upward the capital and other requirements employed in the rating agency models for maintenance of certain ratings levels. It is possible that the outcome of any such review of us would have additional adverse ratings consequences, which could have a material adverse effect on our results and financial condition. We may need to take actions in response to changing standards or capital requirements set by any of the rating agencies, which could cause our business and operations to suffer. We cannot predict what additional actions rating agencies may take, or what actions we may take in response to the actions of rating agencies.

### We may be exposed to business, operational, regulatory, reputational and other risks in connection with climate change.

Climate change is an area of significant focus for governments and regulators, investors and ING's customers, and developments with respect to climate change topics may expose ING to significant risks. The perception of climate change as a risk by civil society, shareholders, governments and other stakeholders continues to increase, including in relation to the financial sector's operations and strategy, and international actions regulating or restricting CO2 emissions, such as the Paris agreement, may also result in financial institutions coming under increased pressure from such stakeholders regarding the management and disclosure of their climate risks and related lending and investment activities. Additionally, rising climate change concerns may lead to additional regulation that could increase our operating costs or negatively impact the profitability of our investments and lending activities, including those involving the natural resources sector. ING may incur substantial costs in complying with current or future laws and regulations relating to climate change, including with respect to international actions regulating or restricting CO2 emissions or changes in capital requirements regulations in response to climate change. In addition, ING is exposed to transition risks related to climate change, which result from changes in the behaviour of economic and financial actors in response to the implementation of energy policies or technological changes. Any of these risks may result in changes in our business activities or other liabilities or costs, including exposure to reputational risks, any of which may have a material and adverse impact on our business, results or financial condition.

For a description of the physical risks to our business resulting from climate change, see '– Operational risks, such as systems disruptions or failures, breaches of security, cyberattacks, human error, changes in operational practices, inadequate controls including in respect of third parties with which we do business, natural disasters or outbreaks of communicable diseases may adversely impact our reputation, business and results' above.

### An inability to retain or attract key personnel may affect our business and results.

ING Group relies to a considerable extent on the quality of its senior management, such as members of the executive committee, and management in the jurisdictions which are material to ING's business and operations. The success of ING Group's operations is dependent, among other things, on its ability to attract and retain highly qualified personnel. Competition for key personnel in most countries in which ING Group operates, and globally for senior management, is intense. ING Group's ability to attract and retain key personnel, in senior management and in particular areas such as technology and operational management, client relationship management, finance, risk and product development, is dependent on a number of factors, including prevailing market conditions and compensation packages offered by companies competing for the same talent.

The (increasing) restrictions on remuneration, plus the public and political scrutiny especially in the Netherlands, will continue to have an impact on existing ING Group remuneration policies and individual remuneration packages for personnel. For example, under the EU's amended Shareholder Rights Directive, known as 'SRD II', which came into effect on June 10, 2019, ING is required to hold a shareholder advisory vote on ING's remuneration policy for directors (including members of the executive board and the supervisory board) and on the annual remuneration report for such directors. This may restrict our ability to offer competitive compensation compared with companies (financial and/or non-financial) that are not subject to such restrictions and it could adversely affect ING Group's ability to retain or attract key personnel, which, in turn, may affect our business and results.

### We may incur further liabilities in respect of our defined benefit retirement plans if the value of plan assets is not sufficient to cover potential obligations, including as a result of differences between results and underlying actuarial assumptions and models.

ING Group companies operate various defined benefit retirement plans covering a number of our employees. The liability recognised in our consolidated balance sheet in respect of our defined benefit plans is the present value of the defined benefit obligations at the balance sheet date, less the fair value of each plan's assets, together with adjustments for unrecognised actuarial gains and losses and unrecognised past service costs. We determine our defined benefit plan obligations based on internal and external actuarial models and calculations using the projected unit credit method. Inherent in these actuarial models are assumptions, including discount rates, rates of increase in future salary and benefit levels, mortality rates, trend rates in health care costs, consumer price index, and the expected return on plan assets. These assumptions are based on available market data and the historical performance of plan assets, and are updated annually. Nevertheless, the actuarial assumptions may differ significantly from actual results due to changes in market conditions, economic and mortality trends and other assumptions. Any changes in these assumptions could have a significant impact on our present and future liabilities to and costs associated with our defined benefit retirement plans.

## Risks related to the Group's risk management practices

### Risks relating to our use of quantitative models or assumptions to model client behaviour for the purposes of our market calculations may adversely impact our reputation or results.

We use quantitative methods, systems or approaches that apply statistical, economic financial, or mathematical theories, techniques and assumptions to process input data into quantitative estimates. Errors in the development, implementation, use or interpretation of such models, or from incomplete or incorrect data, can lead to inaccurate, noncompliant or misinterpreted model outputs, which may adversely impact our reputation and results. In addition, we use assumptions in order to model client behaviour for the risk calculations in our banking books. Assumptions are used to determine the interest rate risk profile of savings and current accounts and to estimate the embedded option risk in the mortgage and investment portfolios. Assumptions based on past client behaviour may not always be a reliable indicator of future behaviour. The realisation or use of different assumptions to determine client behaviour could have a material adverse effect on the calculated risk figures and, ultimately, our future results or reputation. Furthermore, we may be subject to risks related to changes in the laws and regulations governing the risk management practices of financial institutions. For further information, see 'Risks related to the regulation and supervision of the Group – Changes in laws and/or regulations governing financial services or financial institutions or the application of such laws and/or regulations may increase our operating costs and limit our activities' above.

### We may be unable to manage our risks successfully through derivatives.

We employ various economic hedging strategies with the objective of mitigating the market risks that are inherent in our business and operations. These risks include currency fluctuations, changes in the fair value of our investments, the impact of interest rates, equity markets and credit spread changes, the occurrence of credit defaults and changes in client behaviour. We seek to control these risks by, among other things, entering into a number of derivative instruments, such as swaps, options, futures and forward contracts, including, from time to time, macro hedges for parts of our business, either directly as a counterparty or as a credit support provider to affiliate counterparties. Developing an effective strategy for dealing with these risks is complex, and no strategy can completely insulate us from risks associated with those fluctuations. Our hedging strategies also rely on assumptions and projections regarding our assets, liabilities, general market factors and the creditworthiness of our counterparties that may prove to be incorrect or prove to be inadequate. Accordingly, our hedging activities may not have the desired beneficial impact on our results or financial condition. Poorly designed strategies or improperly executed transactions could actually increase our risks and losses. Hedging strategies involve transaction costs and other costs, and if we terminate a hedging arrangement, we may also be required to pay additional costs, such as transaction fees or breakage costs. There have been periods in the past, and it is likely that there will be periods in the future, during which we have incurred or may incur losses on transactions, possibly significant, after taking into account our hedging strategies. Further, the nature and timing of our hedging transactions could actually increase our risk and losses. Hedging instruments we use to manage product and other risks might not perform as intended or expected, which could result in higher (un)realised losses, such as credit value adjustment risks or unexpected P&L effects, and unanticipated cash needs to collateralise or settle such transactions. Adverse market conditions can limit the availability and increase the costs of hedging instruments, and such costs may not be recovered in the pricing of the underlying products being hedged. In addition, hedging counterparties may fail to perform their obligations, resulting in unhedged exposures and losses on positions that are not collateralised. As such, our hedging strategies and the derivatives that we use or may use may not adequately mitigate or offset the risks they intend to cover, and our hedging transactions may result in losses.

Our hedging strategy additionally relies on the assumption that hedging counterparties remain able and willing to provide the hedges required by our strategy. Increased regulation, market shocks, worsening market conditions (whether due to the ongoing euro crisis or otherwise), and/or other factors that affect or are perceived to affect the financial condition, liquidity and creditworthiness of ING may reduce the ability and/or willingness of such counterparties to engage in hedging contracts with us and/or other parties, affecting our overall ability to hedge our risks and adversely affecting our business, results and financial condition.

### Our risk management policies and guidelines may prove inadequate for the risks we face.

We have developed risk management policies and procedures and will continue to review and develop these in the future. Nonetheless, our policies and procedures to identify, monitor and manage risks may not be fully effective, particularly during extremely turbulent times. The methods we use to manage, estimate and measure risk are partly based on historic market behaviour. The methods may, therefore, prove to be inadequate for predicting future risk exposure, which may be different than suggested by historical experience. For instance, these methods may not predict the losses seen in the stressed conditions in recent periods, and may also not adequately allow prediction of circumstances arising due to government interventions and stimulus packages, which increase the difficulty of evaluating risks. Other methods for risk management are based on evaluation of information regarding markets, customers, catastrophic occurrence or other information that is publicly known or otherwise available to us. Such information may not always be accurate, complete, updated or properly evaluated. Management of operational, compliance, legal and regulatory risks requires, among other things, policies and procedures to record and verify large numbers of transactions and events. These policies and procedures may not be fully effective, resulting in a material and adverse impact on our competitive position, reputation, business, results and financial position.

### Risks related to the Group's liquidity and financing activities

**We depend on the capital and credit markets, as well as customer deposits, to provide the liquidity and capital required to fund our operations, and adverse conditions in the capital and credit markets, or significant withdrawals of customer deposits, may impact our liquidity, borrowing and capital positions, as well as the cost of liquidity, borrowings and capital.**

Adverse capital market conditions have in the past affected, and may in the future affect, our cost of borrowed funds and our ability to borrow on a secured and unsecured basis, thereby impacting our ability to support and/or grow our businesses. Furthermore, although interest rates are at or near historically low levels, since the recent financial crisis, we have experienced increased funding costs due in part to the withdrawal of perceived government support of such institutions in the event of future financial crises. In addition, liquidity in the financial markets has also been negatively impacted as market participants and market practices and structures adjust to new regulations.

We need liquidity to pay our operating expenses, interest on our debt and dividends on our capital stock, maintain our securities lending activities and replace certain maturing liabilities. Without sufficient liquidity, we will be forced to curtail our operations and our business will suffer. The principal sources of our funding include a variety of short-and long-term instruments, including deposit fund, repurchase agreements, commercial paper, medium- and long-term debt, subordinated debt securities, capital securities and shareholders' equity.

In addition, because we rely on customer deposits to fund our business and operations, the confidence of customers in financial institutions may be tested in a manner that may adversely impact our liquidity and capital position. Consumer confidence in financial institutions may, for example, decrease due to our or our competitors' failure to communicate to customers the terms of, and the benefits to customers of, complex or high-fee financial products. Reduced confidence could have an adverse effect on our liquidity and capital position through withdrawal of deposits, in addition to our revenues and results. Because a significant percentage of our customer deposit base is originated via Internet banking, a loss of customer confidence may result in a rapid withdrawal of deposits over the Internet.

In the event that our current resources do not satisfy our needs, we may need to seek additional financing. The availability of additional financing will depend on a variety of factors, such as market conditions, the general availability of credit, the volume of trading activities, the overall availability of credit to the financial services industry, our credit ratings and credit capacity, as well as the possibility that customers or lenders could develop a negative perception of our long- or short-term financial prospects. Similarly, our access to funds may be limited if regulatory authorities or rating agencies take negative actions against us. If our internal sources of liquidity prove to be insufficient, there is a risk that we may not be able to successfully obtain additional financing on favourable terms, or at all. Any actions we might take to access financing may, in turn, cause rating agencies to re-evaluate our ratings.

Disruptions, uncertainty or volatility in the capital and credit markets may also limit our access to capital. Such market conditions may in the future limit our ability to raise additional capital to support business growth, or to counterbalance the consequences of losses or increased regulatory capital and rating agency capital requirements. This could force us to (i) delay raising capital, (ii) reduce, cancel or postpone payment of dividends on our shares, (iii) reduce, cancel or postpone interest payments on our other securities, (iv) issue capital of different types or under different terms than we would otherwise, or (v) incur a higher cost of capital than in a more stable market environment. This would have the potential to decrease both our profitability and our financial flexibility. Our results, financial condition, cash flows, regulatory capital and rating agency capital position could be materially adversely affected by disruptions in the financial markets.

Furthermore, regulatory liquidity requirements in certain jurisdictions in which we operate are becoming more stringent, undermining our efforts to maintain centralised management of our liquidity. These developments may cause trapped pools of liquidity and capital, resulting in inefficiencies in the cost of managing our liquidity and solvency, and hinder our efforts to integrate our balance sheet. An example of such trapped liquidity includes our operations in Germany where German regulations impose separate liquidity requirements that restrict ING's ability to move a liquidity surplus out of the German subsidiary.

### As a holding company, ING Groep N.V. is dependent for liquidity on payments from its subsidiaries, many of which are subject to regulatory and other restrictions on their ability to transact with affiliates.

ING Groep N.V. is a holding company and, therefore, depends on dividends, distributions and other payments from its subsidiaries to fund dividend payments and to fund all payments on its obligations, including debt obligations. Many of our subsidiaries, including our bank subsidiaries, are subject to laws that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to ING Groep N.V.

In addition, our bank subsidiaries are subject to restrictions on their ability to lend or transact with affiliates and to minimum regulatory capital and other requirements, as well as restrictions on their ability to use client funds deposited with them to fund their businesses. Additional restrictions on related-party transactions, increased capital and liquidity requirements and additional limitations on the use of funds in client accounts, as well as lower earnings, can reduce the amount of funds available to meet the obligations of ING Groep N.V., and even require ING Groep N.V. to provide additional funding to such subsidiaries. Restrictions or regulatory action of that kind could impede access to funds that ING Groep N.V. needs to make payments on its obligations, including debt obligations, or dividend payments. In addition ING Groep N.V.'s right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to the prior claims of the subsidiary's creditors.

There is a trend towards increased regulation and supervision of our subsidiaries by the governments and regulators in the countries in which those subsidiaries are located or do business. Concerns about protecting clients and creditors of financial institutions that are controlled by persons or entities located outside of the country in which such entities are located or do business have caused or may cause a number of governments and regulators to take additional steps to 'ring fence' or maintain internal total loss-absorbing capacity at such entities in order to protect clients and creditors of such entities in the event of financial difficulties involving such entities. The result has been and may continue to be additional limitations on our ability to efficiently move capital and liquidity among our affiliated entities, thereby increasing the overall level of capital and liquidity required by ING on a consolidated basis.

Furthermore, ING Groep N.V. has in the past and may in the future guarantee the payment obligations of certain of its subsidiaries, including ING Bank N.V., subject to certain exceptions. Any such guarantee may require ING Groep N.V. to provide substantial funds or assets to its subsidiaries or their creditors or counterparties at a time when ING Groep N.V. or its subsidiaries are in need of liquidity to fund their own obligations.

The requirements for ING Groep N.V. to develop and submit recovery and resolution plans to regulators, and the incorporation of feedback received from regulators, may require us to increase capital or liquidity levels or issue additional long-term debt at ING Groep N.V. or particular subsidiaries or otherwise incur additional or duplicative operational or other costs at multiple entities, and may reduce our ability to provide ING Groep N.V. guarantees for the obligations of our subsidiaries or raise debt at ING Groep N.V. Resolution planning may also impair our ability to structure our intercompany and external activities in a manner that we may otherwise deem most operationally efficient. Furthermore, arrangements to facilitate our resolution planning may cause us to be subject to additional costs such as resolution planning related taxes and funds. Any such limitations or requirements would be in addition to the legal and regulatory restrictions described above on our ability to engage in capital actions or make intercompany dividends or payments.

## Additional risks relating to ownership of ING shares

### Holders of ING shares may experience dilution of their holdings.

ING's AT1 Securities may, under certain circumstances, convert into equity securities, and such conversion would dilute the ownership interests of existing holders of ING shares and such dilution could be substantial. Additionally, any conversion, or the anticipation of the possibility of a conversion, could depress the market price of ING shares. Furthermore, we may undertake future equity offerings with or without subscription rights. In case of equity offerings with subscription rights, holders of ING shares in certain jurisdictions, however, may not be entitled to exercise such rights unless the rights and the related shares are registered or qualified for sale under the relevant legislation or regulatory framework. Holders of ING shares in these jurisdictions may suffer dilution of their shareholding should they not be permitted to, or otherwise chose not to, participate in future equity offerings with subscription rights.

### Because we are incorporated under the laws of the Netherlands and many of the members of our Supervisory and Executive Board and our officers reside outside of the United States, it may be difficult to enforce judgments against ING or the members of our Supervisory and Executive Boards or our officers.

Most of our Supervisory Board members, our Executive Board members and some of the experts named in this Annual Report, as well as many of our officers are persons who are not residents of the United States, and most of our and their assets are located outside the United States. As a result, investors may not be able to serve process on those persons within the United States or to enforce in the United States judgments obtained in US courts against us or those persons based on the civil liability provisions of the US securities laws.

Investors also may not be able to enforce judgments of US courts under the US federal securities laws in courts outside the United States, including the Netherlands. The United States and the Netherlands do not currently have a treaty providing for the reciprocal recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. Therefore, we may not be able to enforce in the Netherlands a final judgment for the payment of money rendered by any US federal or state court based on civil liability, even if the judgment is not based only on the US federal securities laws, unless a competent court in the Netherlands gives binding effect to the judgment.

Therefore, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the U.S. federal securities laws, would not be enforceable in the Netherlands unless the underlying claim is re-litigated before a Dutch court. However, under current practice, the courts of the Netherlands may be expected to render a judgment in accordance with the judgment of the relevant U.S. court, provided that such judgment (i) is a final judgment and has been rendered by a court which has established its jurisdiction on the basis of internationally accepted grounds of jurisdictions, (ii) has not been rendered in violation of elementary principles of fair trial, (iii) is not contrary to the public policy of the Netherlands, and (iv) is not incompatible with (a) a prior judgment of a Netherlands court rendered in a dispute between the same parties, or (b) a prior judgment of a foreign court rendered in a dispute between the same parties, concerning the same subject matter and based on the same cause of action, provided that such prior judgment is not capable of being recognized in the Netherlands. It is uncertain whether this practice extends to default judgments as well.

Based on the foregoing, there can be no assurance that U.S. investors will be able to enforce against us or members of our board of directors, officers or certain experts named herein who are residents of the Netherlands or countries other than the United States any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

In addition, there is doubt as to whether a Dutch court would impose civil liability on us, the members of our board of directors, our officers or certain experts named herein in an original action predicated solely upon the U.S. federal securities laws brought in a court of competent jurisdiction in the Netherlands against us or such members, officers or experts, respectively.

# Non-financial appendix

Our annual report integrates financial and non-financial performance data. We report on areas of our business and operations where we can have a material impact both inside the organisation and externally.

The Executive Board and the Supervisory Board share the ultimate responsibility for reviewing and approving our annual report, including disclosures on material topics. For more information on our annual reporting governance refer to the About This Report chapter. Information on data collection, scope, bounderies and definitions can be found in the GRI & SASB Index.

## Sustainability governance

The overarching principles governing our approach to sustainability are set out in our global Sustainability Direction. Our global head of Sustainability reports directly to Management Board Banking member Isabel Fernandez. Specific responsibilities are delegated, via the Global Sustainability department, to business units and subject-matter experts who help develop ING's policies, programmes and targets in response to sustainability-related risks and opportunities, in line with our global Sustainability Direction. Progress on identified priorities is communicated regularly to the Management Board Banking and to external stakeholders through ING's Quarterly Reports.

The responsibility for our various sustainability targets lies either with the MBB member responsible for that specific area, or with the MBB as a whole. For example, responsibility for reduction of our own operational environmental footprint, managed via the Environmental Programme, lies with the Chief Operating Officer (COO). The COO sponsors the Environmental Programme and oversees our performance interests, including policies, implementation and continuous improvement. The programme ensures that the targets are integrated within the relevant business functions, and if necessary, translated to policy. For more information, please go to Environmental Programme. The Board's overall responsibility for social and environmental risks and opportunities is formalised in our Executive Board Charter.

## Understanding what matters most Ⓐ

ING identifies topics which have the most impact on our business and are the highest priority for stakeholders in our value chain. This process allows us to prioritise and focus on the most material topics and effectively address these in our policies, programmes and targets.

In 2018 we conducted an extensive assessment, consisting of global peer, media, trend and regulatory analyses, combined with surveys across seven external stakeholder groups and engagements with ING's senior management and subject matter experts. The process was aligned with the guidelines and standards of the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) and resulted in a list of material topics.

The 2018 materiality analysis outcomes served as the basis for our 2019 analysis. The core of this year's process was a validation using internal and external data sources while ensuring the principles of completeness, accuracy and relevance. The process included the following inputs:

- Internal and external stakeholder perspectives;
- The results of an internal risk assessment conducted in 2019;
- ING's Think Forward strategy;
- Industry trend reports from think-tanks and thought leaders;
- Regulatory developments.

The aggregation of these inputs resulted in preliminary results which were validated in a peer and media-analysis. The process received reasonable assurance from audit firm KPMG.

As a result, the topic Business ethics and culture' was renamed 'Culture, ethics and integrity', to emphasise the element of 'integrity'. Furthermore, we adjusted the scope of the topic 'Financial performance' including systemic risk in the definition.

In the World Around Us chapter, we link the material topics with relevant trending themes and our approach. Our disclosures of key performance indicators along our material topics are referenced in ING's 2019 GRI & SASB Index.

## Economic value generated

ING contributes to the overview legal entities economies of over 40 countries where we operate. The table below provides an overview of our direct financial contributions to some of our key stakeholders. Related key performance indicators are available in our value creation model in Our Strategy and How We Create Value chapter.

**Economic value generated and distributed from continuing operations**

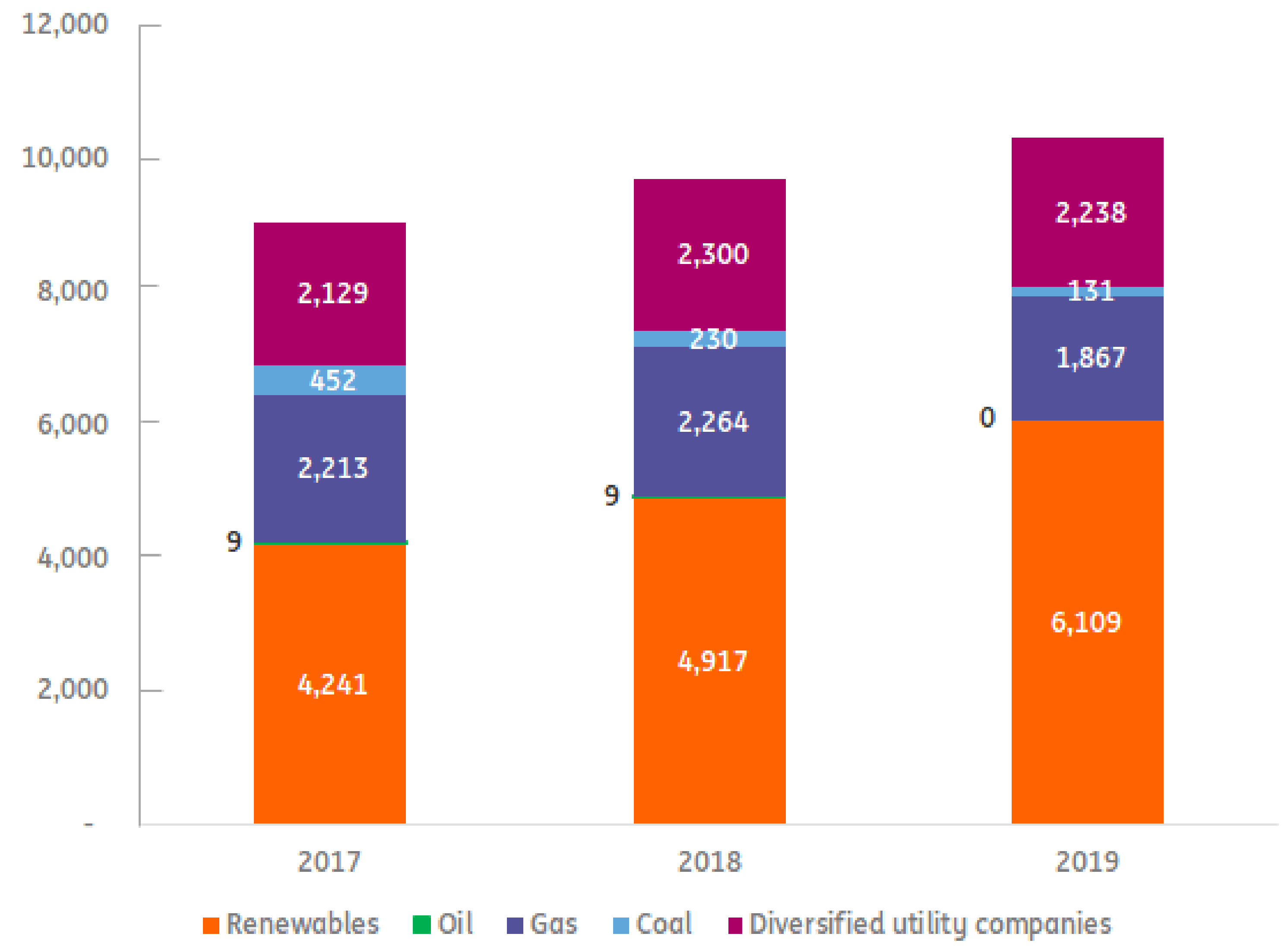
| In EUR million | | Economic value | | |
|---|---|---|---|---|
| **Stakeholder group** | **Indicator** | **2019** | **2018** | **2017** |
| Suppliers | Operating cost | 2,107 | 2,362 | 2,382 |
| Employees | Staff expenses | 5,755 | 5,420 | 5,202 |
| Shareholders | Net result from continuing operations | 4,781 | 4,703 | 4,905 |
| Governments | Corporate income tax and bank taxes | 2,375 | 2,402 | 2,661 |
| Community | Total donations | 12.4 | 13.3 | 14.9 |

## Energy policy in practice

**Thermal coal category**

| in EUR million in lending O/S | 2019 | 2018 | Y/Y change |
|---|---|---|---|
| Mining (including coal terminals) | 211 | 234 | -10% |
| Power generation, coal-fired power plants | 180 | 230 | -22% |

**Power generation portfolio** Total power generation lending O/S in EUR million



# Responsible finance

Responsible finance remains a critical strategic growth area for us. We're strongly committed to supporting the transition of our clients around the globe to drive progress on climate action and financial health. We do this through various financial instruments, including green loans, sustainable improvement loans, bonds and advisory.

We remain committed to social impact finance through lending to projects that lead to, for example, basic infrastructure or essential services. The tables below provide a breakdown of our direct lending for environmental and social activities as at 31 December 2019.

**Climate Finance**

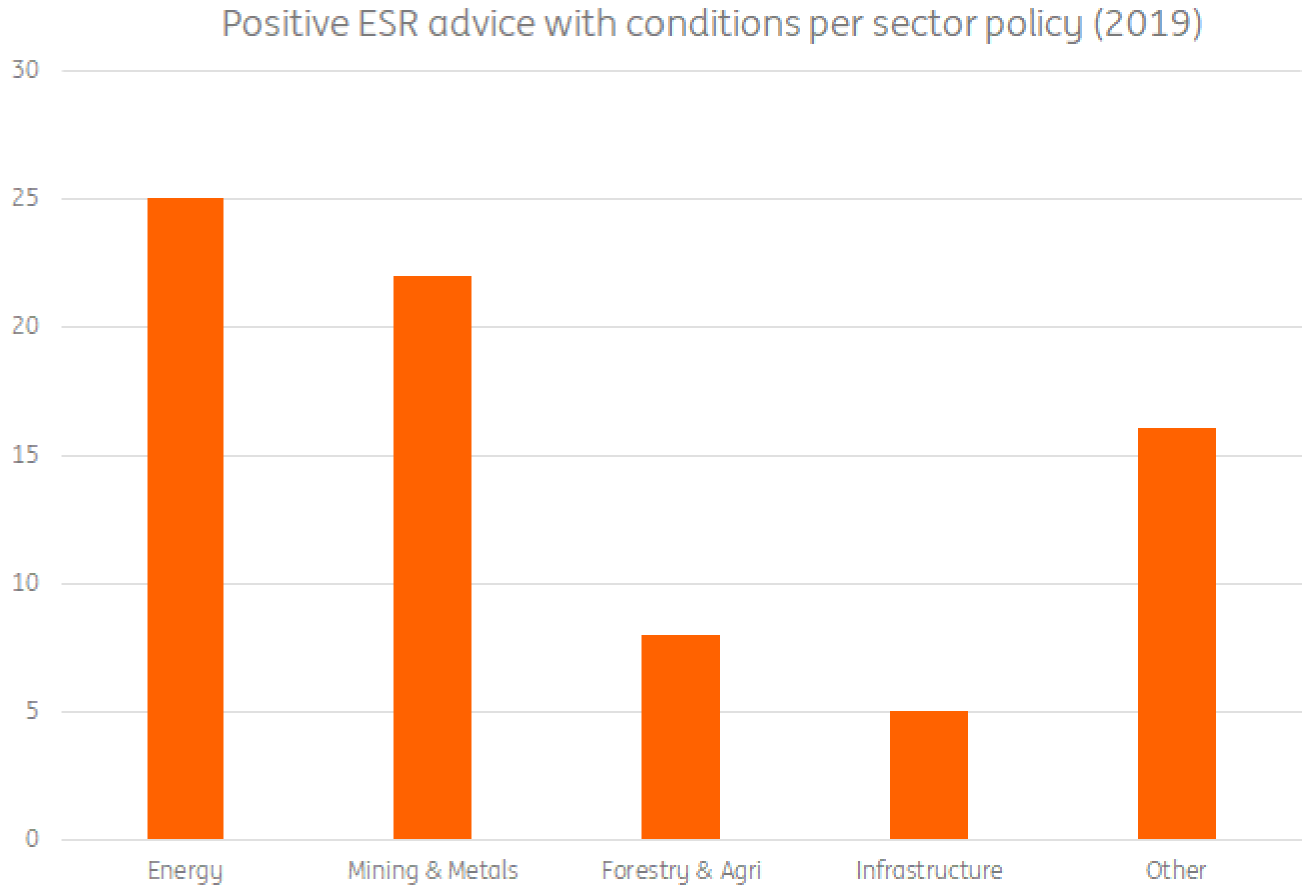
| in EUR million | 2019 | 2018 |
|---|---|---|
| Energy transition | 6,639 | 5,271 |
| Low carbon buildings | 10,593 | 9,229 |
| Energy efficiency | 133 | 133 |
| Transport | 917 | 1,214 |
| Waste management | 41 | 28 |
| Information technology and communications | 30 | 211 |
| Water (including climate adaptation) | 251 | 276 |
| Other climate finance | 76 | 147 |
| Total | **18,680** | **16,510** |

**Social Impact Finance**

| in EUR million | 2019 | 2018 |
|---|---|---|
| Basic infrastructure | 447 | 516 |
| Community development | 20 | |
| Essential services | 283 | 258 |
| Total | **750** | **775** |

# ESR policy in practice

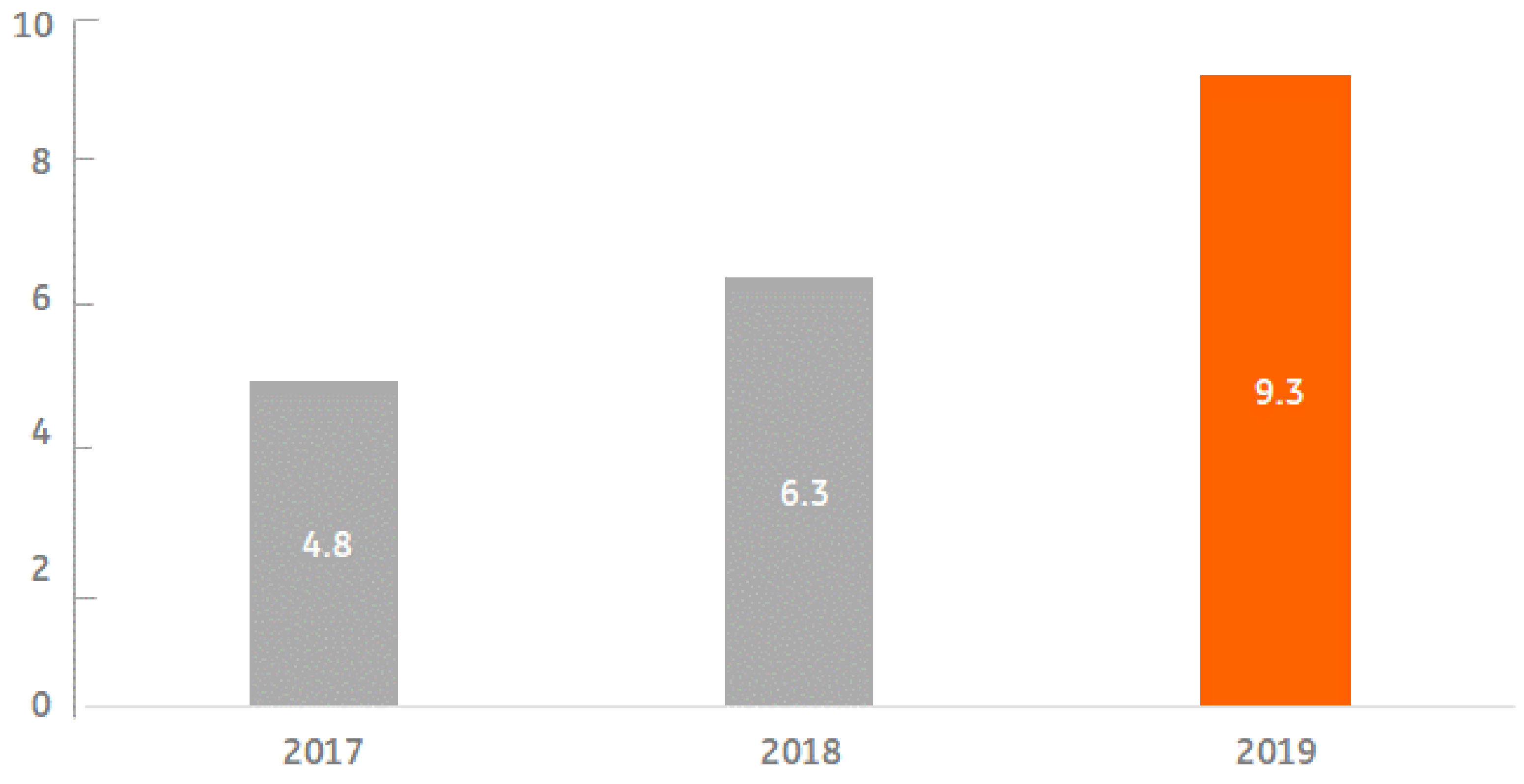
The Environmental and Social Risk (ESR) team issued 304 advice reports in 2019. Of these, 45 percent were positive, 25 percent positive subject to conditions and 30 percent negative. Conditions can play an important role in helping clients transition towards improved environmental and social performance on the ground. The graph below breaks down the positive ESR advice reports with conditions into policy sectors. For a full breakdown of all ESR advice reports please refer to the Risk Management chapter.




'Other' includes advice reports covering the policy areas animal welfare, chemicals and manufacturing.

## Sustainable Investment (SI) services

**Sustainable investment** (in EUR billion at year-end)




The 2019 growth in SI services outpaced the financial markets average as we expanded our service offering and benefitted from increasing customer interest.

## UNEP FI Principles for Responsible Banking

ING is a founding signatory of the Principles for Responsible Banking, adopted in New York in September 2019 by more than 130 banks representing more than $47 trillion in assets. The six principles provide a framework for a sustainable banking system, on topics including alignment, target-setting and transparency.

ING and more than 30 other banks then took that a step further with the Collective Commitment to Climate Action. This is the banking sector's farthest-reaching commitment to align with the Paris Agreement goals and is a good example of how the Principles for Responsible Banking can be made actionable.

## UNEP FI Principles for Responsible Banking

| Reporting and self-assessment requirements | ING response in 2019 |
|---|---|
| **Principle 1: Alignment** | |
| 1.1 Describe (high-level) the bank's business model, including the main customer segments served, types of products and services provided, the main sectors and types of activities, and where relevant the technologies financed across the main geographies in which the bank has operations or provides products and services. | ▪ ING at a Glance;<br>▪ ING Purpose & Strategy;<br>▪ Lending portfolio overview (NACE 2 level);<br>▪ Overview legal entities per country;<br>▪ How we create value. |
| 1.2 Describe how the bank has aligned and/or is planning to align its strategy to be consistent with and contribute to society's goals, as expressed in the Sustainable Development Goals (SDGs), the Paris Climate Agreement, and relevant national and regional frameworks. | ▪ Sustainability Direction (strategy);<br>▪ ING's approach to climate action. The centrepiece of ING's climate action approach is Terra;<br>▪ ING's approach to financial health;<br>▪ Contributions to the SDGs;<br>▪ Outline of our policies and position statements with regard to activities and sectors with potential negative impacts is available on Our Stance pages;<br>▪ ING's Environmental and Social Risk (ESR) policy framework;<br>▪ ING's 2018 Human Rights Report and Human Rights Update 2019. |

## UNEP FI Principles for Responsible Banking

| Reporting and self-assessment requirements | ING response in 2019 |
|---|---|
| **Principle 2: Impact and Target Setting** | |
| 2.1 Show that the bank has identified the areas in which it has its most significant (potential) positive and negative impact through an impact analysis. | ▪ In our choice of SDG focus areas we've considered our most significant exposure;<br>▪ Our Terra Approach focuses on the sectors in our loan book that are responsible for most greenhouse gas emissions:<br>- As a global bank ING's approach is guided by global frameworks – the UN Sustainable Development Goals (SDGs) and the Paris Climate Agreement;<br>- ING conducted a saliency analysis in line with the United Nations Guiding Principles (UNGP) in 2018. In 2019, ING conducted client engagements on the salient issues identified in 2018 –Salience chapter, HR report 2018, and Summary of engagement findings chapter, HR Update 2019;<br>- ING's annual materiality analysis is in line with the IIRC principles and GRI Standards and covered by reasonable assurance;<br>- ING has identified sensitive issues and activities across our portfolio – see Our Stance;<br>- ING implemented sector sustainability policies. |
| Provide the bank's self-assessment statement. | ING meets the requirements under Principle 2.1. |
| 2.2 Show that the bank has set and published a minimum of two SMART targets, which address at least two of the identified 'areas of most significant impact', resulting from the bank's activities and provision of products and services. | ▪ ING has set sector-level climate alignment goals;<br>▪ ING commits to close to zero coal-fired power generation and thermal coal mining by 2025;<br>▪ ING targets an increase in the number of customers who feel financially empowered (SDG 8);<br>▪ Our SDG target-related metrics are disclosed on our website. |
| Provide the bank's self-assessment statement. | ING meets the requirements under this Principle. |

| UNEP FI Principles for Responsible Banking | |
|---|---|
| Reporting and self-assessment requirements | ING response in 2019 |
| **Principle 2: Impact and Target Setting** | |
| 2.3 Show that the bank has defined actions and milestones to meet the set targets. Show that the bank has put in place the means to measure and monitor progress against the set targets. | ▪ We will continue to monitor and report our progress towards aligning our portfolio with the Paris Climate Agreement. Please refer to Next steps in our 2019 Terra Progress Report;<br>▪ ING is advancing its approach to measuring customers' financial health. We obtain reasonable assurance on our measure of customers' feeling of financial empowerment. This demonstrates a robust set of definitions, measurement processes and reporting. |
| Provide the bank's self-assessment statement. | ING meets the requirements under Principle 2.3. |
| 2.4 For each target separately, show that the bank has implemented the actions it had previously defined to meet the set target | ▪ In 2019, we recorded growth in Climate Finance and lending to ESG Leaders (13 percent and 0.1 percent, respectively);<br>▪ ING reports our performance in our two business segments Wholesale and Retail Banking, specifically:<br>- Climate Finance;<br>- Social Impact Finance;<br>- Sustainable investing brokerage;<br>- Number of customers who felt financially empowered.<br>▪ Our Human Rights Update 2019 provides a follow-up on client engagements on the salient issues identified in 2018;<br>▪ Our sector-level climate alignment as measured by Terra is available in Climate Alignment Dashboards (CAD) – see p. 11 of our 2019 Terra Progress Report. |
| Provide the bank's self-assessment statement. | ING meets the requirements under this Principle. |

| UNEP FI Principles for Responsible Banking | |
|---|---|
| Reporting and self-assessment requirements | ING response in 2019 |
| **Principle 3: Clients and Customers** | |
| 3.1 Provide an overview of the policies and practices the bank has in place and/or is planning to put in place to promote responsible relationships with its customers. This should include high-level information on programmes and actions implemented (and/or planned), their scale and, where possible, the results thereof. | ▪ ING Think – a Retail engagement platform on financial empowerment;<br>▪ Think Forward Initiative (TFI) – a cross-sector initiative focused on the behaviour behind financial decision-making. TFI aims to harness those insights to help people make better financial decisions;<br>▪ Select engagement case studies;<br>▪ The View - a Wholesale Banking engagement platform on sustainable finance. |
| 3.2 Describe how the bank has worked with and/or is planning to work with clients and customers to encourage sustainable practices and enable sustainable economic activities. This should include information on actions planned/implemented, products and services developed, and, where possible, the impacts achieved. | ▪ ING proactively engages Wholesale Banking clients in sectors with material impacts on the environment and society. An overview of sensitive sectors and activities is available in our ESR framework and on Our Stance. For example, in the palm oil sector we engage clients on their 'No Deforestation, No Peat, No Exploitations' policy and RSPO certification;<br>▪ The View – a Wholesale Banking engagement platform on sustainable finance;<br>▪ An overview of sectors where we may engage clients on sustainability;<br>▪ Approach and results from human rights engagements with clients – p.13-33 of our Human Rights Update 2019; An overview of sustainable finance products and services is available online;<br>▪ Client case studies cited in Our business chapter. |

## UNEP FI Principles for Responsible Banking

| Reporting and self-assessment requirements | ING response in 2019 |
|---|---|
| **Principle 4: Stakeholders** | |
| 4.1 Describe which stakeholders (or groups/types of stakeholders) the bank has consulted, engaged, collaborated or partnered with for the purpose of implementing these Principles and improving the bank's impacts. This should include a high-level overview of how the bank has identified relevant stakeholders and what issues were addressed/results achieved. | ▪ 2° Investing Initiative (2°ii) on our climate approach;<br>▪ Overview of partnerships, memberships & endorsements;<br>▪ Stakeholder groups consulted in our materiality analysis;<br>▪ Materiality analysis process;<br>▪ More information on how we engage. |

## UNEP FI Principles for Responsible Banking

| Reporting and self-assessment requirements | ING response in 2019 |
|---|---|
| **Principle 5: Governance & Culture** | |
| 5.1 Describe the relevant governance structures, policies and procedures the bank has in place/is planning to put in place to manage significant positive and negative (potential) impacts and support effective implementation of the Principles. | We have instituted Board-level oversight of environmental, social and governance issues. This includes:<br>▪ Sustainability governance;<br>▪ Climate Change Committee, chaired by our CRO and co-chaired by our Board member overseeing sustainability (p.59 of our 2019 Terra Progress Report);<br>▪ Human Rights Steering Committee (see Human Rights Report 2018);<br>▪ Data Ethics Council:<br>- ESR Framework;<br>- Whistleblower policy. |
| 5.2 Describe the initiatives and measures the bank has implemented or is planning to implement to foster a culture of responsible banking among its employees. This should include a high-level overview of capacity building, inclusion in remuneration structures and performance management and leadership communication, amongst others. | ▪ ING's sustainability performance is assessed in determining the Executive Team's variable compensation;<br>▪ ING runs a number of employee engagement programmes. This includes ESR training for risk officers and online Equator Principles training;<br>▪ In 2019, ING and labour unions agreed on an all-staff annual compensation payable in 2020 and 2021 and dependent on the sustainability performance of ING. |
| 5.3 Show that the bank has a governance structure in place for the implementation of the PRB, including:<br>a) target-setting and actions to achieve targets set<br>b) remedial action in the event of targets or milestones not being achieved or unexpected negative impacts being detected. | Oversight of the Principles for Responsible Banking implementation has been integrated into our sustainability governance, meaning that it is now a board-level mandate. ING has signed the Collective Commitment to Climate Action whose implementation is governed using the same governance structure. |
| Provide the bank's self-assessment statement. | ING meets the requirements under this Principle. |

## UNEP FI Principles for Responsible Banking

| Reporting and self-assessment requirements | ING response in 2019 |
|---|---|
| **Principle 6: Transparency & Accountability** | |
| 6.1 Show that the bank has progressed on implementing the six Principles over the last 12 months in addition to the setting and implementation of targets in minimum two areas (see 2.1-2.4)... | ▪ In the past year, ING has devised a TCFD action plan and appointed a TCFD Steering Committee;<br>▪ In the past year, ING has identified a new SDG impact priority linked to targets under SDG 13;<br>▪ In 2019, ING updated its materiality analysis results, following a 2018 integration of the materiality analysis processes by Group Risk, Strategy and Sustainability;<br>▪ In the past year, ING has conducted client engagements on its salient human rights issues following the UNGP framework;<br>▪ In 2019, a total of 25.9 million retail customers felt financially empowered after interactions with ING, up from 25 million a year earlier. |
| Provide the bank's self-assessment statement. | ING meets the requirements under this Principle. |

# Our people

## Budget training and development

| | 2019 | | 2018 | | 2017 | |
|---|---|---|---|---|---|---|
| | in EUR million | Per FTE | in EUR million | Per FTE | in EUR million | Per FTE |
| ING | 64 | 1,139 | 87 | 1,587 | 76 | 1,335 |

## Training

| in number of trainings completed x1,000 | 2019 | 2018 | 2017 |
|---|---|---|---|
| Classroom | 58.4 | 56.0 | 61.9 |
| Blended | NA | 32.5 | NA |
| Online | 288.9 | 356.7 | 245.2 |
| On-the-job training | 0 | NA | 0.2 |
| Programme | 22.7 | NA | 20.2 |
| Virtual Classroom | 0.8 | NA | NA |
| Workshop/Seminar | 1.6 | NA | NA |
| Exam | 3.7 | NA | NA |
| Task | 9.2 | NA | NA |
| Other | NA | NA | 10.9 |
| Total | **385.3** | **445.2** | **338.4** |

## Leavers and turnover[1] (headcount)

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Voluntary | 3,848 | 4,108 | 3,141 |
| Involuntary | 2,791 | 2,493 | 2,654 |
| Not recorded | 165[2] | 0 | 1 |
| Total | **6,804** | **6,601** | **5,796** |
| | | | |
| Turnover rate % | 12.4 | 12 | 10.6 |

1 Total leavers headcount in 2019 divided by headcount on 1 January 2019
2 Mainly Turkey employees who did not give their consent before their departure

## Percentage of employees that have undergone a performance review (headcount)

| in percentage of employees | 2019 | 2018 | 2017 |
|---|---|---|---|
| ING | 96 | 93 | 99 |

## Percentage of employees covered by collective bargaining agreements (headcount)

| in percentage of employees | 2019 | 2018 | 2017 |
|---|---|---|---|
| ING | 64 | 48.6 | 59 |

## Total workforce gender breakdown [1] (headcount)

| | 2019 | | 2018 | | 2017 | |
|---|---|---|---|---|---|---|
| in percentage of employees | Female | Male | Female | Male | Female | Male |
| ING | 48.3 | 51.6 | 48.6 | 51.3 | 49.1 | 50.8 |

1 Deviations from 100% in the sum of category totals are due to employee gender not recorded.

## Total number of employees by contract (permanent/temporary), by gender (headcount)

2019

| number of employees | Male | Female | Unknown | Total |
|---|---|---|---|---|
| Permanent | 28,017 | 25,867 | 45 | 53,929 |
| Temporary | 1,003 | 1,252 | 12 | 2,267 |

## Total number of employees by contract (full-time/part-time), by gender (headcount)

2019

| number of employees | Male | Female | Unknown | Total |
|---|---|---|---|---|
| Full-time | 27,998 | 22,796 | 51 | 50,845 |
| Part-time | 1,008 | 4,303 | 1 | 5,312 |
| Not recorded | 14 | 20 | 5 | 39 |

## Total number of employees by contract (permanent/temporary), by region (headcount)

2019

| number of employees | Permanent | Temporary | Total |
|---|---|---|---|
| Asia | 6,446 | 156 | 6,602 |
| Australia | 1,342 | 133 | 1,475 |
| Belgium | 7,708 | 125 | 7,833 |
| Netherlands | 13,988 | 731 | 14,719 |
| North America | 604 | | 604 |
| Rest of Europe | 23,734 | 1122 | 24,856 |
| South and Mid-America | 107 | | 107 |

## Sickness and absenteeism (headcount)

| in percentage of employees | 2019 | 2018 | 2017 |
|---|---|---|---|
| ING | 3.94 | 3.89 | 3.96 |

## Total workforce breakdown (headcount)

| | 2019 | 2018 | 2017 | | 2019 | 2018 | 2017 |
|---|---|---|---|---|---|---|---|
| Gender | | | | Age group | | | |
| Female | 27,119 | 26,655 | 26,644 | < 30 | 11,049 | 10,442 | 9,785 |
| Male | 29,020 | 28,090 | 27,605 | 30-50 | 36,199 | 35,693 | 35,365 |
| Not recorded | 57 | 59 | 53 | > 50 | 8,929 | 8,643 | 9,122 |
| | | | | Not recorded | 19 | 26 | 30 |
| Total | **56,196** | **54,804** | **54,302** | Total | **56,196** | **54,804** | **54,302** |
| FT / PT Status | | | | Temp / Perm on ING contract | | | |
| Full-time | 50,845 | 49,207 | 48,397 | Permanent | 53.929 | 52,732 | 52,324 |
| Part-time | 5,312 | 5,502 | 5,874 | Temporary | 2,267 | 2,072 | 1,978 |
| Not recorded | 39 | 95 | 31 | | | | |
| Total | **56,196** | **54,804** | **54,302** | Total | **56,196** | **54,804** | **54,302** |
| Geographic region | | | | | | | |
| Asia | 6,602 | 6,707 | 6,650 | | | | |
| Australia | 1,475 | 1,305 | 1,182 | | | | |
| Belgium | 7,833 | 8,155 | 8,812 | | | | |
| Netherlands | 14,719 | 14,135 | 14,087 | | | | |
| North America | 604 | 614 | 579 | | | | |
| Rest of Europe | 24,856 | 23,781 | 22,891 | | | | |
| South- and Mid-America | 107 | 107 | 101 | | | | |
| Total | **56,196** | **54,804** | **54,302** | | | | |

# Environmental programme

We measure and manage the impact of our operations though our environmental programme. The environmental impact of our operations mainly consists of energy use in buildings and IT systems, business travel, waste and water.

In 2015 we announced global targets for reducing our operational footprint. To underpin our programme and global targets, we have successfully developed our Environmental Management System (EMS). Our EMS has helped us to make progress against our 2020 targets and to integrate the programme throughout our business activities and operations. We are currently defining our new targets which will be announced in 2020.

## Our commitments:

- We'll reduce our CO2e emissions by 50 percent by 2020 (base year 2014).
- We'll reduce global residual waste by 20 percent by 2020 (base year 2014).
- We'll ill reduce our water footprint by 20 percent by 2020 (base year 2014).
- We'll procure 100 percent renewable electricity for all ING buildings where we have management control worldwide by 2020.
- We'll remain carbon neutral by offsetting operational carbon emissions.

## Our progress:

- We achieved our 2020 CO2e emissions target in 2019. Our extrapolated CO2e emissions decreased by 57 percent in 2019 relative to our base year. This was achieved, by reducing business travel and by reducing global energy consumption, including heating oil, natural gas and district heating.
- Our residual waste was reduced by 17 percent in 2019 relative to our base year.
- Our water consumption was reduced by 13 percent in 2019 relative to our base year
- We maintained our proportion of renewable electricity consumption at 98 percent of total electricity consumption. We aim to achieve our 100 percent renewable electricity target in 2020.
- We maintained carbon-neutral operations in 2019 by offsetting emissions caused by business travel and grey energy use.
- We maintained ISO14001 certification on the environmental programme including its compliance at the head-office in the Netherlands.

We offset 100 percent of our operational carbon emissions through the purchase of Voluntary Carbon Units (VCUs), with the majority originating from a high impact Acre Amazonian Rainforest REDD+ Portfolio in Brazil. This collection of three projects prevents deforestation across 105,000 hectares of pristine rainforest in the Amazon basin by promoting sustainable economic livelihoods. By granting land tenure and providing agricultural training to local communities, trees are kept standing, drawing down carbon from the atmosphere and protecting the area's rich biodiversity. The portfolio is verified and validated to the Verified Carbon Standard (VCS), and has achieved Gold Level status under the Climate Community and Biodiversity (CCB) Standard.

Find out more about the environmental programme.

**Breakdown of energy consumption**[1]

| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
|---|---|---|---|---|---|---|
| Coverage (% of employees) | 99 | 99 | 98 | 99 | 99 | 98 |
| | MWh x 1000 | | | kilotonne CO2e | | |
| Electricity | 4 | 4 | 12 | 3 | 3 | 5 |
| Renewable electricity | 215 | 213 | 214 | - | - | - |
| Natural gas | 49 | 57 | 65 | 11 | 13 | 15 |
| Fuel oil | 1 | 1 | 2 | 0.4 | 0.5 | 1 |
| District heating | 22 | 21 | 22 | 4 | 4 | 5 |
| Total energy | 291 | 296 | 315 | 19 | 20 | 25 |
| | | | | | | |
| Total energy per FTE | 5.3 | 5.6 | 6.0 | 0.3 | 0.4 | 0.5 |

## Kilometres and carbon emissions through business travel[1]

| | 2019 | 2018 | 2017 | 2019 | 2018 | 2017 |
|---|---|---|---|---|---|---|
| Coverage (% of employees) | 99 | 99 | 98 | 99 | 99 | 98 |
| | KM x 1 million | | | kilotonne CO2e | | |
| Total travel | 206 | 241 | 246 | 23 | 30 | 30 |
| Travel per FTE | - | - | - | 0.4 | 0.6 | 0.6 |

1 Business travel comprises travel by air and by road for business purpose only.

## Carbon emissions extrapolated[1]

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Coverage (% of employees) | 99 | 96 | 96 |
| in kilotonne CO2e | | | |
| Total carbon | 42 | 50 | 55 |
| Total carbon per FTE in tonne | 0.8 | 0.9 | 1.0 |
| Total extrapolated carbon | 44 | 57 | 64 |
| | | | |
| Total carbon Scope 1[2] | 12 | 14 | 16 |
| Total carbon Scope 2[3] | 7 | 7 | 10 |
| Total carbon Scope 3[4] | 23 | 30 | 30 |

1 The carbon total is the sum of scope 1, 2 and 3 emissions. The total can deviate from the sum of all categories due to rounding-up to kilotonnes. Our calculation methodology and scope are defined in ING's Non-financial data reporting protocol.
2 Scope 1 comprises emissions from our use of natural gas and fuel oil.
3 Scope 2 comprises emissions from our use of electricity, renewable electricity and district heating.
4 Scope 3 comprises emissions from our business travel by air and car. There is a decrease in both car and air travel kms leading to lower emissions. Part of the decrease is attributed to data correction and improvement in car travel emissions. While scope 3, category 15 (emissions through lending and investments) is material to ING's indirect emissions footprint, due to measurement complexity and lack of quality data, ING is not able accurately to measure and disclose this figure.

## Residual waste[1]

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Coverage (% of employees) | 99 | 99 | 99 |
| in tonnes | | | |
| Total | 2,370 | 1,836 | 1,576 |

1 Residual waste is the difference between total and recycled waste. The data quality in 2019 improved and we recorded a significant increase in residual waste in Romania.

## Water consumption

| | 2019 | 2018 | 2017 |
|---|---|---|---|
| Coverage (% of employees) | 94 | 95 | 96 |
| in thousands of m3 | | | |
| Total | 500 | 498 | 563 |

# Stakeholder engagement

On a day-to-day basis we actively engage with our customers and other stakeholders, including investors, government officials and NGOs, on relevant topics, issues and challenges, both at an expert level and at a (senior) management and Board level. In revising our ESR policies, we follow a structured consultation process and proactively seek input from relevant stakeholders. In line with our Sustainability Direction we contribute to multiple international initiatives and cooperate as a member in platforms such as the Equator Principles Association and the UN Environmental Programme for Financial Institutions (UNEP FI). We seek external direction and validation of our sustainability priorities by endorsing international standards such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the Global Reporting Initiative. An up-to-date overview of partnerships, memberships and endorsements can be found online.

We define stakeholders as individuals or organisations who may be directly or indirectly impacted by ING's activities or individuals or organisations who may have an impact on ING's activities or ability to provide products and services. ING identifies, selects and continually monitors our stakeholders. Stakeholders who temporarily manifest themselves on certain topics can also have a relevant input. Throughout the year, challenges and issues are discussed with and brought to our attention by various stakeholders. Below we highlight some key issues addressed in 2019.

## Engagement cases 2019

### NGO concerns over impacts of Brazil tailings dam collapses

In March 2019, in a letter posted on the Business & Human Rights Resource Centre ING provided a response to NGO concerns following the January 2019 tailings dam collapse in Mina do Feijao, Brumadinho, in Brazil's state of Minas Gerais. The Centre invited 21 business partners and investors of the mine's owner – Brazilian company Vale – to respond to letters from global NGOs raising concerns about the impacts and human rights violations related to the Mina do Feijao dam disaster of 25 January 2019. The NGO letters also address the case of the rupture of the Fundao dam in 2015, considered one of the worst dam disasters in Brazil. The dam was owned by Samarco, a joint venture of Vale and BHP.

While Vale is a client of ING, we do not and have not provided finance for either of the two sites - Mina do Feijao or Fundao. It is our policy to discuss with our clients cases impacting their operations. Due to confidentiality agreements, we cannot communicate the nature or outcomes of our client dialogues.

Find our mining sector policy in our Environmental and Social Risk (ESR) framework.
ING's human rights policy and commitments.

### The Trans Adriatic Pipeline (TAP) project

In the March-May 2019 period, NGOs expressed their concern about ING financing the construction of the Trans Adriatic Pipeline project. TAP is a 870km long natural gas pipeline running from Greece to Italy. TAP is part of a bigger infrastructure, bringing gas from Azerbaijan to Europe. TAP will connect to the EU infrastructure supplying natural gas all over Europe, including Austria, Germany, France, Belgium, the Netherlands and the UK.

The project is considered of strategic interest by the European Commission as it 'contributes to the Energy Union's key objectives of energy security by diversifying routes and sources'. The project furthermore contributes to the EU's climate goals. The European Investment Bank stated that "gas [from TAP] is needed for the phasing out of coal, as well as to back up intermittent renewables. Overall, the project should not have any direct effect on Climate Change, because it is an alternative source of gas and does not intend to cover any new demand."

Based on these considerations and after an ESR screening, ING decided to support the project.
The support of the EU ensures that the project will be in line with EU human rights standards.
We will continue our dialogue with the NGOs concerned as we seek to understand any potential negative impacts.

Read about climate action and 2019 Terra Progress Report.

### NGO report on complicity in Amazon deforestation

In April 2019, NGO Amazon Watch released the report Complicity in Destruction II, focusing on the impacts of deforestation on the world's largest rainforest and the Indigenous peoples living there. The report explores the links between 56 Brazilian companies fined for environmental offences in the Amazon since 2017, and global commodity traders and financiers.

The report lists companies involved in the production and sourcing of soy, beef, leather, timber and sugar in Brazil, as well as their shareholders and a number of global banks like ING working with these sectors. In a response to the NGO report shared with the Business and Human Rights Resource Centre, ING clearly states its zero tolerance to the facilitation of deforestation and/or the burning down of tropical forests, a stance embedded in ING's forestry and agricultural commodities sector policy.

ING recognises that commodity traders such as those listed in the Amazon Watch report face supply chain risks, which is why in our 2019 Environmental and Social Risk (ESR) policy revision we enhanced the due diligence of supply chains. As part of our due diligence processes, ING re-assesses clients running high risks on a yearly basis, and clients with normal risk profiles every three years. During engagements in the soft commodities sector ING addresses sector best practices including soft commodity certifications.

Read more about our ESR policy framework and Our Stance on deforestation.

### NGO notifications under the OECD's Guidelines for Multinational Enterprises

In April 2019, the Dutch National Contact Point (NCP) for the OECD Guidelines for Multinational Enterprises published its final statement, ending nearly two years of mediation in an NGO notification. The notification, filed in 2017 by NGOs Oxfam Novib, Greenpeace, BankTrack and Friends of the Earth, alleged that ING's climate policy was in breach of the OECD Guidelines.

The NCP is an institution that monitors whether companies comply with the corporate social responsibility guidelines of the OECD, the organisation for economic cooperation between industrialised countries. Find out more about the work of the NCP.

The final statement of the NCP describes ING's approach to climate action (the Terra approach) as "an innovative approach towards measuring, target-setting and steering the bank's climate impact", and "a positive development".

Read more about the case.
Read more about ING's approach to climate action.

In July 2019, NGO Friends of the Earth Netherlands and its Indonesia and Liberia affiliates notified the Dutch NCP that ING may be in breach of the OECD Guidelines by financing palm oil-related activities. In its initial assessment published January 2020, the NCP did not express an opinion on either the accuracy of the allegations made by the NGOs or the response provided by ING.

In accordance with its procedures, the Dutch NCP has offered to facilitate a dialogue between ING and Friends of the Earth, which ING accepted.

Palm oil is used as an ingredient in a range of products, from toothpaste and soap, to food items like crisps and biscuits. The growing demand for palm oil across global supply chains raises concerns about the environmental and social sustainability of palm oil plantations. ING shares these concerns and welcomes the opportunity to elaborate on our approach in an NCP-facilitated dialogue.

According to Friends of the Earth, "ING's clearest recourse to cease its contribution to the harms is to divest from the industrial palm oil sector and specifically the named companies", an opinion stated in the notification.

However, replacing oil palms with another type of oil crop would increase the demand for agriculture land seven to nine times. In April 2019, the World Wildlife Fund (WWF) released a statement calling on banks and institutional investors to address deforestation, climate change and human rights abuses in the sector. According to WWF, "divestment is not the answer".

This view is in line with those of the Dutch government and other reputable stakeholders, such as the International Union for Conservation of Nature (IUCN) and NGO Solidaridad.

In addition, Friends of the Earth state that ING's client relationships with palm oil producing companies constitute a situation of 'contributing to' adverse impacts under the OECD Guidelines.

A bank can either be 'linked to' the adverse impacts of its clients, or 'contribute to' these impacts. This classification is most relevant as it defines the responsibility, and thus actions required, of the bank. Much depends on a bank's due diligence processes and its leverage applied seeking to address adverse impacts. ING considers it is 'linked to' the alleged adverse impacts of its clients.

Read more about the case.
Read our stance on palm oil.

## NGO report on shale gas and plastics finance

In July 2019, NGO Fair Finance Guide published a study into Dutch banks and insurance companies' finance and investments in ten chemicals, oil and gas producers responsible for a large part of the global plastics supply. The report makes a link between the production of shale gas, ethane and plastics. The report then highlights the societal debate and controversy around shale gas extraction, an unconventional extraction method which makes use of hydraulic fracturing. The report further claims that of all Dutch banks ING is the largest investor in plastics made of shale gas.

ING believes that the use of plastics is an essential aspect of modern life, not only in food packaging but also medical instruments like syringes. Its properties help people and companies reduce food waste, CO2 emissions and enable advances in healthcare. At the same time, we believe we need to take action to reduce plastics waste. ING has endorsed the New Plastics Economy (NPEC) Global Commitment by the Ellen MacArthur Foundation. This is a joint effort by the industry and governments to tackle plastic waste and pollution and increase the recycled content of plastic packaging from 2% now to an average of 25% by 2025.

We have focused our plastics commitment on plastic packaging and helping eliminate plastic waste and pollution, as that's where we believe we can have the most impact. We aim to reduce, reuse and recycle plastic packaging within our own operations as well as to support our clients in the packaging and recycling parts of the plastics value chain.

Our stance on plastic.
Our stance on shale gas.

## BankTrack Human Rights Benchmark 2019

In November 2019, NGO Banktrack published its Human Rights Benchmark 2019, the third edition of the benchmark. It evaluates 50 of the largest private sector commercial banks globally against a set of 14 criteria based on the UN Guiding Principles on Business and Human Rights (UNGP). ING's final score is 7 out of 14, up 1.5 points from the previous benchmark, putting the bank in the "Front runners" group of banks.

ING's progress reflects our implementation of the UNGP, which we began in 2018, and our follow-up on salient human rights risks in 2019. ING's Human Rights Update, published in November 2019, gives an update on the steps we've taken to improve human rights.

Find out more about human rights at ING.
ING 2018 Human Rights Report and 2019 Human Rights Update
ING ESR Framework.

**NGOs request that ING take action after bribery claims at Indonesian power plant**

In November 2019, BankTrack forwarded a letter from NGO 350.org requesting that ING take action in response to ongoing investigations into alleged bribery by an employee of Hyundai Engineering and Construction in Indonesia. Media reports cited in the letter allege that an Indonesian public official accepted bribes to help settle local community protests in the Cirebon II coal power plant, whose construction is being financed by a banking consortium including ING.

It is our policy to discuss with our clients major events affecting their operations. Due to client confidentiality we are not able to communicate the nature or the outcomes of these dialogues.

ING complaints procedure.
ING whistleblower policy.
Our stance on energy and coal power.

# Non-GAAP measures

ING Group evaluates its results using a financial performance measure called underlying result. Underlying result is used to monitor the performance of ING Group at a consolidated level and by segment. The Executive Board and Management Board of ING Bank consider this measure to be relevant to an understanding of the Group's financial performance because it gives better insight into the commercial developments of the company. Underlying result is derived by excluding from IFRS the following: special items; the impact of divestments and Insurance Other.

Special items include items of income or expense that are significant and arise from events or transactions that management consider distinct from the regular operating activities. These may either be recurring or non-recurring in nature but must be of a significant size to qualify as a special item. Disclosures on comparative periods also reflect the impact of current period's divestments. Insurance Other reflects (former) insurance related activities that are not part of the discontinued operations.

In 2019, there are no items excluded from the GAAP measures.

The items excluded from the GAAP measures in 2018 are:
- The EUR -775 million settlement agreement with the Dutch authorities on regulatory issues. Under the terms of the settlement, ING paid a fine of EUR 675 million and EUR 100 million for disgorgement. ING did not claim a tax deduction in connection with these payments.
- Result of Insurance Other, reflecting the result on the warrants on Voya and NN Group shares, amounting to EUR 90 million after tax. ING had sold its last warrants related to its former insurance activities in November 2018.

Underlying result is a non-GAAP financial measure and is not a measure of financial performance under IFRS. Because underlying result is not determined in accordance with IFRS, underlying result as presented by ING may not be comparable to other similarly titled measures of performance of other companies. Note that underlying ratios are also impacted by the items above when calculated using the individual income or expense line item to which the items relate.

Below table shows a comparison of GAAP versus non-GAAP of the most important measures used by ING.

## Reconciliation between IFRS and Underlying

| | | 2019 | 2018 | 2017 |
|---|---|---|---|---|
| Net result attributable to Equity holders of the parent | (a) | 4,781 | 4,703 | 4,905 |
| -/- Net result from special items | | | -775 | 0 |
| -/- Net result Insurance Other | | | 90 | -52 |
| Underlying net result Banking | (b) | 4,781 | 5,389 | 4,957 |
| | | | | |
| Shareholders' equity ING Group (year-end) | | 53,769 | 50,932 | 50,406 |
| Shareholders' equity ING Group (average *) | (c) | 50,861 | 47,938 | 48,412 |
| | | | | |
| ING Group's total return on equity | (a / c) | 9.4% | 9.8% | 10.1% |
| ING Group's underlying return on equity | (b / c) | 9.4% | 11.2% | 10.2% |
| | | | | |
| Total income | (d) | 18,306 | 18,176 | 17,773 |
| -/- Income from special items | | | | 121 |
| -/- Income from Insurance Other | | | 89 | -53 |
| Underlying income | (e) | 18,306 | 18,088 | 17,704 |
| | | | | |
| Staff expenses | | 5,755 | 5,420 | 5,202 |
| Other operating expenses | | 4,598 | 5,262 | 4,627 |
| Total operating expenses | (f) | 10,353 | 10,682 | 9,829 |
| -/- Operating expenses from special items | | | 775 | |
| Underlying operating expenses | (g) | 10,353 | 9,907 | 9,829 |
| | | | | |
| Cost/income ratio | (f / d) | 56.6% | 58.8% | 55.3% |
| Underlying cost/income ratio | (g / e) | 56.6% | 54.8% | 55.5% |

* average shareholders' equity calculated based on quarter-end figures after excluding 'interim profit not included in CET1 capital' as from 31 March 2017.

# General information

## ING Publications

- ING Group Annual Report, in English
- ING Bank Annual Report, in English
- Annual Report on Form 20-F, in English (in accordance with SEC guidelines)

The publications can be downloaded on the internet: www.ing.com, button 'Publications'. The printed version of the Annual Report on Form 20-F, in English, can be ordered here.

This Annual Report contains the Reports of the Executive Board and Supervisory Board as well as the Financial statements and other information for the financial year 2019 in their original language (English).

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