2018

ING Bank Annual Report

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About ING

The Think Forward strategy has provided a blueprint for transforming the customer experience at a time when digitalisation is increasing and mobile devices are rapidly becoming our customers' channel of choice. Inspired by the strategy's Customer Promise – clear and easy, anytime and anywhere, empower, and keep getting better – we have delivered a differentiating digital customer experience through innovations such as digital financial advisors, forecasting tools and instant lending available through award-winning mobile apps as part of an omnichannel approach.

Strong customer satisfaction ratings and a continuing healthy increase in customer numbers show that we are succeeding in staying relevant to customers in a fast-changing market for banking services. The number of retail customers increased in 2018 by a million to 38.4 million. Primary relationships, where customers have a current account with recurring income and at least one other product, increased by more than a million to 12.5 million in 2018. And in net promoter scores (NPS), customers ranked us number one in seven of our 13 retail markets.

Strong and consistent profitability has been driven by the steady increase in our lending business at resilient margins and by growth of fee income. The well-diversified increase in lending spans segments and geographies. In particular, lending to businesses and consumers has grown strongly in our Challengers & Growth Markets. In Wholesale Banking, Industry Lending and Transaction Services activities have led to strong increases in lending and fees. And new propositions that add value for customers, like investment options that offer an alternative to low-yielding savings, have contributed to an increase in fee and commission income in our Retail businesses.

ING of tomorrow

While we can look back on many accomplishments since the launch of the Think Forward strategy, we are also conscious of the challenges ahead and the need to keep re-inventing ourselves to remain relevant to customers in the future. The strategic vision embodied in the Think Forward strategy is also guiding us as we navigate a changing world.

Banks can no longer differentiate themselves with products – they've become commodities. The key differentiator of the future will be the customer experience. That experience will be digital, and non-banks are setting the standard.

Fintechs are leveraging easy mobile access, transparency and low cost to compete for lucrative parts of banks' value chains in areas like payments and instant lending. But the biggest challenge is coming from the Big Tech platforms that are setting the digital standard in terms of customer experience and where people spend more and more of their time when they're online – to shop, to socialise, for news and entertainment, and for a whole range of other needs.

To compete with Big Tech and other platforms, banks will need to become platforms themselves. They will need to offer the same personal, instant, relevant and seamless experience. They will need to be open to becoming go-to platforms that keep people coming back, offering third-party products and beyond banking services. And they will need to become experts in managing and analysing customer data in order to know the needs and preferences of their customers, create new offers and improve the customer experience.

The Big Tech platforms are not only disrupting banking with their customer experience. They are now directly competing with banks. Apple Pay is growing rapidly and has expanded to more than 20 countries, WeChat is lending to consumers and Alibaba's Ant Financial now has the world's biggest money market fund by assets. And with tech platforms now leading the rankings of the world's largest companies by market capitalisation, they have the size and scale to be formidable competitors.

At ING, we have three-fold approach to platforms. Firstly, we are developing our own go-to platform for customers' financial needs and relevant offers beyond banking. Secondly, we are pursuing independent initiatives in partnership with others. And thirdly, we are participating on others' platforms. For retail, we develop our own platforms, like Yolt, and only participate on other platforms if doing so drives traffic to ours. For wholesale, in addition to our own platforms, such as Cobase, we participate on third-party platforms where other industry players are active.

To achieve our ambition, we are evolving towards one single scalable global platform that will offer a uniform and borderless experience. And one that is open so we can also provide relevant third-party and beyond banking offers. This involves standardising IT using a modular approach in order to create a scalable platform that can accommodate growth at low cost. To support this, we are developing standardised processes and shared services, one way of managing data, and one agile way of working across ING. As an intermediate step we are converging businesses with similar customer propositions, such as in the Benelux where we are integrating our platforms and harmonising business models, the Model Bank initiative where we're developing a common platform to roll out in five European countries and Welcome in Germany where we're developing a go-to financial platform offering our own and third-party services.

One important area where we believe banks can differentiate themselves is privacy. With their tradition of safeguarding people's money and financial information, by extension they enjoy an advantage over tech platforms when it comes to whom people trust most with their data. By building on that trust, we can create appealing propositions for users of our platform and profitable models for cooperating with other platforms, including Big Tech.

Our strategy on a page

Purpose

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

Customer Promise

Clear and easy | Anytime, anywhere | Empower | Keep getting better

Strategic Priorities

Creating a differentiating customer experience

1. Earn the primary relationship
2. Develop analytics skills to understand our customers better
3. Increase the pace of innovation to serve changing customer needs
4. Think beyond traditional banking to develop new services and business models

Enablers

Simplify and streamline | Operational Excellence | Performance Culture | Lending Capabilities

Financial developments ING Bank

ING Bank posted strong commercial results in 2018, but they were negatively affected by the €775 million settlement agreement with the Dutch authorities on regulatory issues. The net result dropped to €4,607 million from €5,019 million in 2017, primarily due to the settlement agreement which was recorded as a special item. In 2017, there was a special item related to a €121 million tax charge at ING Australia Holdings Ltd, for which a full reimbursement is expected to be received from NN Group. Although the bottom-line impact for ING Bank was nil, it affected both the tax and 'other income' lines.
The underlying net result of ING Bank rose 7.2 percent to €5,382 million in 2018 from €5,019 million in 2017; this was partly caused by a lower underlying effective tax rate supported by the tax reforms in Belgium and the US. Underlying net result is derived from total net result by excluding the impact from special items.

The underlying result before tax rose 3.3 percent to €7,526 million in 2018 from €7,283 million in 2017, primarily driven by continued business growth at resilient interest margins, higher net fee and commission income, and slightly lower risk costs. Commercial performance was strong in 2018. ING Bank grew net core lending (adjusted for currency impacts, and excluding Bank Treasury and the run-off portfolios) by €36.6 billion, or 6.4 percent, and net customer deposits rose by €19.3 billion in 2018. The global retail customer base grew by one million customers to reach 38.4 million over the year, and the number of primary customers rose by 1.1 million to 12.5 million.

Total underlying income increased 2.0 percent to €18,102 million from €17,755 million in 2017. Net interest income rose 1.2 percent to €13,949 million, due to an increase of the average balance sheet total, partly offset by a narrowing of the net interest margin to 1.53 percent from 1.55 percent in 2017. The increase of the average balance sheet was mainly driven by the continued growth in net core lending and customer deposits. The interest result on customer lending activities increased driven by higher volumes at stable margins. The interest result on customer deposits slightly declined, as the impact of volume growth was more than offset by margin pressure on current accounts (due to lower reinvestment yields); the interest margin on savings stabilised, mainly due to a further lowering of client savings rates in several countries. Net interest income was furthermore negatively affected by a decline in the volatile interest results of Financial Markets. Net fee and commission income rose 3.3 percent to €2,803 million. The increase was mainly in Wholesale Banking (supported by the inclusion of Payvision as from the second quarter of 2018) and most of the Retail Banking countries, except for Belgium and Turkey. Investment and other income rose to €1,350 million from €1,259 million in 2017, mainly caused by higher valuation results and net trading income, including improved hedge ineffectiveness results, and one-off results. The increase was primarily visible in Retail Banking (excluding Belgium) and the Corporate Line. In Wholesale Banking, investment and other income declined, mainly due a loss recorded on the intended sale of an Italian lease run-off portfolio in 2018, while 2017 included a gain on the sale of an equity stake in the real estate run-off portfolio.

Underlying operating expenses increased 1.3 percent to €9,920 million from €9,795 million in 2017. In 2018, expenses included €947 million of regulatory expenses up from €901 million in the previous year. Excluding regulatory costs, expenses were up 0.9 percent, as higher costs for strategic projects and to support business growth, were largely offset by lower performance-related expenses and strict cost management. The underlying cost/income ratio improved to 54.8 percent from 55.2 percent in 2017.

The net addition to the provision for loan losses declined 3.0 percent to €656 million from €676 million in 2017. Risk costs were 21 basis points of average risk-weighted assets, which is well below ING Bank's through-the-cycle average of 40-45 basis points.

The underlying return on IFRS-EU equity of ING Bank rose to 12.6 percent in 2018 from 11.6 percent in 2017.

Retail Banking

ING's Retail business serves 38.4 million customers. ING also has stakes in the Bank of Beijing (China), TMB (Thailand) and Kotak Mahindra Bank (India).

In most of our retail markets we offer a full range of banking products and services, covering payments, savings, investments and secured and unsecured lending.

Market Leaders

Our Market Leaders are mature businesses in Belgium, the Netherlands and Luxembourg where we have strong positions in retail and wholesale banking.

In the first half of 2018, we successfully migrated 600,000 customers from Record Bank into ING in Belgium.

We are combining our strengths in Belgium and the Netherlands under the Unite be+nl programme and building an integrated banking platform. This is part of our strategy to enhance operational excellence, create greater cost-efficiency and provide a consistent, digital-first banking experience for our customers. For example, customers in Belgium will benefit from new functionalities on the ING mobile banking app. ING is also the first major bank in Belgium to offer same-day payments processing.

In the Netherlands we now have 4.3 million mobile app users, including 1.1 million new registered users in 2018. In Belgium, digital adoption is accelerating too, with a net increase of close to 285,000 new active mobile users (36 percent) to 1.07 million users. Some 55 million mobile payments were processed in Belgium in 2018, almost four times higher than in 2017. However, many customers still value face-to-face interactions and we have to balance their needs with our digital ambitions. To this end, we extended the opening hours of our branch network in Belgium.

One of the ways we are harmonising our products is by standardising the look and feel. For example, we have globally reduced more than 95 bank card designs to just eight. In 2018, we introduced the new-look cards in Belgium and the Netherlands. These have a 'clear and easy' look with a symbolic orange 'heart'. This follows the roll-out of the new cards in France in 2017, then Germany, Romania and Wholesale Banking. We will only issue new cards to customers when their existing ones expire to avoid unnecessary waste and costs as we replace all 15 million cards worldwide.

Tapping into the growth of a cashless society and rising demand for mobile payments, ING announced the merger in March 2018 of payments app company Payconiq with Bancontact to create the Bancontact Payconiq Company. Conceived by ING in 2014, Payconiq is a joint initiative with AXA Bank, Belfius, BNP Paribas Fortis, KBC, Rabobank and Volksbank. It allows users to pay for online and in-store purchases with their mobile phones, instantly and seamlessly connecting to their bank account. In 2018, 34 million payments were processed through either Bancontact or Payconiq, which is about twice as many as in 2017.

Around 50,000 merchants in Belgium are signed up to the service, which is available to consumers from all banks, not only the shareholders. In November 2018, the first Dutch retailer signed up, with more to follow as it is rolled out in the Netherlands. Testing has also started in Germany.

At the request of the Dutch Authority for Financial Markets banks compensated SME customers in the Netherlands who had been sold interest rate derivatives during a defined period. The compensation framework (UHK or *Uniform Herstelkader*) was determined by an independent committee set up by the Dutch Finance Minister in 2016. Execution was challenging, with extreme complexity, limited estimated tolerances and high compliance standards under stringent supervision. In 2018, all relevant ING customers received a compensation offer. Of these, 77 percent had been accepted by the end of the year and we foresee high acceptance of the rest. The estimated costs have been recognised in the profit and loss account as part of a provision.

ING actively reached out to customers in the Netherlands with interest-only mortgages to help them plan ahead for when their mortgages mature and the principal repayment is due. Customers can use the insights we provide to take timely action if needed to prevent affordability problems in the future. We believe this results in additional redemptions and product conversions and leads to de-risking of the mortgage portfolio.

Challengers markets

Our Challengers markets are Australia, Austria, Czech Republic, France, Germany, Italy and Spain. Here we're aiming for a full bank relationship, digitally distributed through low-cost retail platforms like Welcome in Germany and Model Bank in several European markets. We are also using 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.

In 2018, we expanded our retail offering in the Czech Republic, which became the first country to go live on the Model Bank platform. We will start integrating customers in Spain, France and Italy onto the platform from 2019. To broaden our activities, we also started testing a mobile-only retail offering in the Philippines.

In Germany and Austria, we rebranded ING-DiBa as ING, in line with our ambition to be the same brand everywhere. And we introduced a new sales and service organisation in Austria to improve the customer experience. We will add mortgages to our Austrian retail offering in January 2019.

One of the ways we're empowering German customers is with real-time updates of transactions on their current account, which they receive via configurable push notifications in their banking app. Mortgages drew a substantial number of new customers to ING in Germany, pushing the volume of new mortgage business in Germany to record highs in 2018. As a result, ING in Germany announced a portfolio volume of mortgage loans of €73 billion for 2018, five percent more than the previous year.

In Spain, we expanded our partnership with El Corte Inglés, Europe's largest department store, to roll out our mobile payments app Twyp in all its supermarkets. This helped to raise Twyp's public visibility among consumers and take a key step forward in its objective to be available to as many people as possible. Customers from any bank can use Twyp to make payments and withdraw cash at 8,000 points of sale, doubling the app's reach in less than a year.

The popularity of the no-fee Orange Everyday transaction account among consumers in Australia led to record numbers of new account openings. In August, we extended this to teens with the launch of Orange Everyday Youth. Customers can also use our Everyday Round Up digital savings tool to help pay off their mortgage more quickly. And with the New Payments Platform (NPP), ING in Australia helped introduce instant payments to the market, in collaboration with NPP Australia and 12 other financial institutions. NPP is an innovative payments infrastructure that contributes to an easy, instant and seamless experience for our customers by providing real-time clearing and settlement, removing the usual two- to three-day wait for transfers to go through.

Growth Markets

Our Growth Markets are businesses with a full range of retail and wholesale banking services in countries with expanding economies and strong growth potential. These include Poland, Romania and Turkey. Here we're investing to achieve sustainable franchises and will focus on digital leadership by converging to the direct-first model and prioritising innovation.

Lending in Poland and Romania showed significant growth in 2018. An attractive mortgage proposition in Poland, pre-approved online loans and simplified digital lending processes in both markets all contributed to this, along with the introduction in Romania of instant online loans in the Home'Bank app.

To stand out in the digitally advanced Polish market, where fintechs are gaining ground among tech-savvy consumers, we extended mobile payments to platforms such as Google Pay and Visa HCE. We also introduced an ING-specific keyboard for our Moje app to simplify mobile commerce and peer-to-peer transactions.

ING in Poland teamed up with fintech Twisto to introduce the country's first e-commerce payment gateway. It enables shoppers (not only ING customers, but from any bank) to buy online now and pay later, and get instant cashback if they return their purchases. Some 200 Polish merchants signed up for the pilot in April 2018, during which over 4,000 transactions were made. The Imoje payments gateway continues to grow by about 200 percent per month.

And to make foreign payments instant and seamless for Polish consumers, for example while travelling, we introduced a multi-currency card that allows users to pay for foreign purchases from several different currency accounts without incurring any commission fees. It has proven popular, with over 100,000 users so far.

For business customers in Poland and Romania, we launched ING Business, a new digital platform that makes banking clear and easy and accessible anytime, anywhere from any device. We also introduced Invoice Financing, a digital micro-factoring solution developed in-house at ING. It gives Polish SME customers control over which invoices they want to pre-finance and when.

And in line with our ambition to help create a low-carbon society we introduced an eco-offering for Polish entrepreneurs. The offering gives the loans we provide a responsible side because it encourages customers to take sustainable actions such as buying energy-efficient equipment for their businesses, for example, or insulating their buildings. See more about our ambition to align ING's overall loan portfolio with global climate goals in the 'Responsible Finance' section below.

Launched in June 2018, Turkey's Orange Extra (Turuncu Ekstra) programme was voted Most Innovative Product by Visa. At the end of 2018, it had 470,200 active customers, of which 183,000 were primary customers and 120,500 were spenders on the programme with Orange Extra cards.

We also teamed up with several merchants in Turkey to offer customers vendor financing for online purchases via our mobile app. For example, they can get a loan for a new phone from the provider at the point of sale. And in another beyond banking collaboration we teamed up with online moving services platform Octovan to develop a tool that calculates the full cost of moving into a new home. The aim is to help the 1.5 million people in Turkey who move each year avoid financial surprises. Users can also apply for a loan to cover unforeseen expenses.

Financial Performance in 2018

Total Retail Banking

Retail Banking recorded a solid set of 2018 results. Net profit rose 2.6 percent to €3,452 million from €3,363 million in 2017. There were no special items excluded from the underlying results in both years. The underlying result before tax increased 2.5 percent to €4,841 million in 2018.

The improvement in pre-tax result was mainly attributable to higher income, which more than offset a slight increase in expenses and higher risk costs. Underlying income rose 2.3 percent, primarily driven by higher income in the Retail Challengers & Growth Markets (supported by continued volume growth and a bigger retail customer base), partly offset by a decline in Retail Belgium due to margin pressure and lower income from investment and financial markets products. Total customer lending increased by €12.0 billion to €408.4 billion compared with the opening balance sheet as of 1 January 2018. Adjusted for currency impacts and excluding Bank Treasury and the WestlandUtrecht Bank (WUB) run-off portfolio, net growth in Retail's core lending book was €22.0 billion. Net customer deposits (also excluding Bank Treasury and currency impacts) grew by €20.1 billion in 2018.

Underlying operating expenses increased 1.3 percent compared with 2017. Excluding regulatory costs, expenses were up 1.2 percent, mainly related to strategic projects and selective business growth in the Retail Challengers & Growth Markets, and higher external staff expenses in Retail Belgium. These increases were partly offset by lower expenses in Retail Netherlands supported by the benefits from the ongoing cost-saving programmes. The underlying cost/income ratio improved to 56.3 percent from 56.9 percent in 2017.

Risk costs rose to €457 million, or 29 basis points of average risk-weighted assets, from €391 million in 2017, reflecting higher risk costs in Retail Belgium and the Retail Other Challengers & Growth Markets, while Retail Netherlands and Retail Germany recorded net releases from loan loss provisions.

Market Leaders

Retail Netherlands

The underlying result before tax of Retail Netherlands rose 4.4 percent to €2,342 million from €2,243 million in 2017. This was mainly due to lower risk costs and benefits from the ongoing cost-saving programmes.

Underlying income rose 0.2 percent to €4,476 million. The interest result was 3.4 percent lower, mainly caused by margin pressure on savings and current accounts, and a decline in the average lending volumes, partly offset by higher margins on mortgages. Net core lending (excluding the WUB run-off portfolio and Bank Treasury-related products) grew by €1.9 billion as from 1 January 2018, of which €0.8 billion in mortgages and €1.1 billion in other lending. Net growth in customer deposits (excluding Bank Treasury) was €3.5 billion in 2018. Net fee and commission income rose by €53 million, or 8.8 percent, primarily due to higher daily banking fees. Investment and other income rose by €78 million, mainly attributable to higher allocated Bank Treasury revenues.

Underlying operating expenses declined 2.1 percent on 2017, mainly driven by the benefits from the ongoing cost-saving initiatives and lower expenses for legal claims.

Risk costs turned to a net release of €31 million, or -6 basis points of average risk-weighted assets, from a net addition of €13 million in 2017, reflecting the continued positive macroeconomic conditions in the Netherlands.

Retail Belgium

Retail Belgium includes ING in Luxembourg.

The underlying result before tax of Retail Belgium fell 24.2 percent to €595 million in 2018, compared with €785 million in 2017. The decline reflects lower income, higher expenses and an increase in risk costs.

Underlying income decreased to €2,369 million from €2,473 million in 2017. The interest result declined 0.7 percent to €1,830 million, mainly due to margin pressure on most products, in part offset by volume growth in the lending portfolio as well as current accounts. The net production in customer lending (excluding Bank Treasury and the sale of a mortgage portfolio) was €6.1 billion, of which €2.2 billion was in mortgages and €3.9 billion in other lending. The net inflow in customer deposits was €3.0 billion in 2018. Net fee and commission income decreased 9.1 percent, mainly due to lower fee income on investment products. Investment and other income fell by €55 million, mainly due to lower income from financial markets products.

Operating expenses rose by €26 million, or 1.6 percent, to €1,610 million, mainly due to higher external staff expenses related to the transformation programmes and the successful integration of Record Bank into ING Belgium.

Risk costs increased by €60 million to € 164 million, or 44 basis points of risk-weighted assets, from €104 million, or 30 basis points of risk-weighted assets, in 2017. The increase was primarily in business lending.

Challengers & Growth Markets

Retail Germany

Retail Germany includes ING in Austria.

The underlying result before tax increased 11.9 percent to €972 million, compared with €869 million in 2017, mainly due to higher income and a higher net release in risk costs.

Underlying income increased 4.3 percent to €1,972 million in 2018 from €1,891 million a year ago. Net interest income declined 1.9 percent reflecting margin compression on mortgages and current accounts, and lower Bank Treasury-related interest income. This was only partly offset by higher margins on savings and deposits and volume growth in most products. Net core lending growth, which excludes Bank Treasury products, was €4.4 billion in 2018, of which €3.6 billion was in mortgages and €0.8 billion in consumer lending. Net inflow in customer deposits (excluding Bank Treasury) was €5.0 billion, mainly driven by a promotional savings campaign in the fourth quarter of 2018. Net fee and commission income rose 4.7 percent, due to higher fee income on investment products and an improvement in fees on current accounts. Investment and other income rose to €76 million, mainly due to improved hedge ineffectiveness results from Bank Treasury.

Operating expenses declined 0.5 percent to €1,027 million from €1,032 million in 2017. This decrease was mainly caused by lower regulatory costs and a decline in marketing expenses, partly offset by higher costs to support business growth and a restructuring provision in 2018.

Risk costs were €-27 million in 2018, compared with €-10 million in 2017, reflecting a benign credit environment in the German market and review of the consumer lending portfolio.

Retail Other

Retail Other consists of the other Challenger countries & Growth Markets, including the stakes in Asia.

Retail Other's underlying result before tax increased 13.0 percent to €932 million in 2018, from €825 million in 2017. This was mainly due to higher income, partly offset by increased expenses and higher risk costs.

Total underlying income rose by €287 million, or 9.5 percent, to €3,315 million. This increase was driven by continued strong commercial results across most countries, reflecting customer growth and higher volumes. Net interest income rose 10.4 percent to €2,690 million, reflecting sustainable growth in lending and customer deposits volumes and an improved total interest margin. The net production (excluding currency effects and Bank Treasury) in customer lending was €9.6 billion, of which €6.4 billion was in mortgages and €3.2 billion in other lending (mainly consumer loans). Net customer deposits grew by €8.6 billion in 2018. Net fee and commission income rose 2.9 percent driven by increases in most countries, partly offset by a decline in Turkey. Investment and other income increased by €23 million, mainly due to a higher dividend from Bank of Beijing and a higher profit contribution from ING Bank's 25% stake in TMB (which was mainly driven by one-offs), while previous year included a gain on the sale of MasterCard shares in Turkey.

Operating expenses increased by €114 million, or 5.9 percent, to €2,033 million. This increase was, next to higher regulatory costs, mainly due to higher staff expenses in most counties to support commercial growth and higher investments in strategic projects.

Risk costs were € 350 million, or 71 basis points of average risk-weighted assets, compared with €284 million, or 58 basis points, in 2017. The increase was mainly attributable to higher risk costs in Italy, Romania and Poland, while risk costs in Turkey remained on the same high level as in 2017.

Wholesale Banking

Wholesale Banking is an important and integral contributor to ING's commercial performance. With a local presence in more than 40 countries, we provide 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.

In 2018, transaction services, payments and cash management, and lending all grew and we expect this to continue as we support our corporate clients with their business needs and with becoming more sustainable.

We sharpened our strategy in 2018 to focus on what clients want – advice, data-driven insights and sector knowledge – and reorganised the way we work to deliver an experience that is borderless, instant, personal and consistent. This includes creating a new Europe, Middle East and Africa (EMEA) region and strengthening our international network by putting more resources (products and people) into Asia and the Americas. This, along with the introduction of a cross-border Strategic Products team fosters collaboration across the regions to give clients access to more products and services. We are also strengthening core banking services, such as Debt Capital Markets and Corporate Finance. And we introduced ING's one Way of Working in our client service and delivery areas to support this new client-led approach.

In September 2018, as part of our commitment to fighting climate change, ING pledged to steer its entire lending portfolio towards the climate goals of the Paris Agreement (see 'Responsible Finance' section).

Low volatility on stock and currency markets dampened appetite for hedging and impacted growth in our Financial Markets business. Mounting concerns about emerging markets currencies and the potential for defaults, and in particular the sharp fall of the Turkish currency, reverberated through lending markets. Pessimism about macro-economic developments such as the trade war between the US and China unsettled financial markets and dampened consumer confidence. The rising oil price caused inflation to increase, subduing real income growth.
Britain's pending exit from the European Union and the potential impact on financial markets saw many international banks forced to make contingency plans to relocate their operations away from London. ING centralised its Financial Markets in London in 2016. We are in an ongoing dialogue with the European Central Bank and the Bank of England's Prudential Regulation Authority to safeguard business continuity, keeping a close eye on the conditions under which the UK exits the EU.

Financial performance in 2018

Wholesale Banking posted good 2018 results, supported by continued net core lending growth and despite the difficult financial markets the whole industry faced. The net result rose to €2,055 million from €1,950 million in 2017, this was primarily due to a lower effective tax rate supported by the impact of the corporate tax reforms in Belgium and the US. There were no special items excluded from the underlying results in both years. The underlying result before tax was €2,755 million, down 3.2 percent from 2017, as higher results in Industry Lending were more than offset by lower results in Financial Markets and Bank Treasury & Other.

Industry Lending posted an underlying result before tax of €2,091 million, up 6.4 percent compared with 2017, primarily due to volume growth, partly offset by some pressure on margins. The 2018 result furthermore included a €66 million gain related to an equity-linked bond in Belgium. The underlying result before tax from General Lending & Transaction Services remained unchanged at €751 million. Higher income, supported by volume growth in General Lending and the inclusion of Payvision as from the second quarter of 2018, was offset by increased expenses (partly due to payment innovation initiatives and higher regulatory costs) and slightly higher risk costs.

Financial Markets recorded an underlying result before tax of €-40 million compared with €82 million in 2017. The drop in result was caused by lower income, which was impacted by lower client activity and challenging global market conditions, partly offset by a modest decline in expenses. The underlying result before tax of Bank Treasury & Other fell to a loss of €47 million compared with a gain of €47 million in 2017. This was mainly due to lower results in the run-off businesses (including a €123 million loss recorded in the fourth quarter of 2018 on the intended sale of an Italian lease run-off portfolio, while 2017 included a €97 million gain on the sale of an equity stake in the real estate run-off portfolio), partly offset by lower expenses for litigation issues.

Total underlying income of Wholesale Banking fell 2.4 percent to €5,781 million compared with 2017, mainly reflecting lower revenues in Financial Markets and the loss on the intended sale of an Italian lease run-off portfolio. Wholesale Banking's net core lending book (adjusted for currency impacts, and excluding Bank Treasury and the Lease run-off portfolio) grew by €14.5 billion in 2018. Net customer deposits (excluding currency impacts and Bank Treasury) shrank by €0.8 billion. The interest result rose 1.3 percent on 2017, whereas net fee and commission income increased 4.8 percent (supported by the inclusion of Payvision). Investment and other income fell by €246 million; this was almost fully attributable to the aforementioned one-off results in the lease and real estate run-off businesses. Underlying operating expenses increased 1.2 percent to €2,826 million due to higher regulatory costs. Expenses excluding regulatory costs were stable, mainly reflecting lower performance-related expenses and strict cost control, and despite the inclusion of Payvision. The underlying cost/income ratio increased to 48.9 percent from 47.1 percent in 2017.

Risk costs declined to €200 million, or 13 basis points of average risk-weighted assets, from €284 million, or 19 basis points in 2017. The relatively low risk costs in 2018 were supported by several larger net releases for clients and only a few larger new additions. On top of that, risk costs for the Italian lease run-off portfolio were significantly lower than in the previous year.

Regulatory Context

Financial conditions slightly tighter

As economic momentum in the US remained strong, the Federal Reserve continued hiking interest rates. The European Central Bank reduced its asset purchase programme.

Given differences in monetary policy stances and economic developments, longer-term yields increased in the US and, on balance, moved sideways in the eurozone. However, in Italy, uncertainty about the forthcoming budget led to a considerable increase in sovereign spreads. Given our geographical footprint, eurozone rate developments have a larger impact than rate developments in the US.

There was little progress on eurozone reform in 2018 given the diverse political interests involved. It's clear that the debate on the Economic and Monetary Union is difficult and progress on the completion of the banking union is slow. We are hoping for progress on the European Deposit Insurance Scheme (EDIS), as it is an absolute requirement for finishing the Banking Union. Furthermore, we have concern about making a 'sovereign debt restructuring mechanism' part of the criteria for support from the European Stability Mechanism.

The review of EU prudential rules, via CRR2/CRD5 (Capital Requirements Regulation/Capital Requirements Directive) and BRRD2 (Bank Recovery and Resolution Directive), was discussed intensively during 2018 by the Council and the European Parliament. The package includes the introduction of new rules, for instance regarding NSFR (net stable funding ratio), a G-SIB (global systemically important bank) surcharge for the leverage ratio, interest rate risk in the banking book and internal MREL (minimum own funds and eligible liabilities).

Data

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. In 2018, two crucial pieces of the new personal data architecture started being rolled out across the EU: the second Payment Services Directive (PSD2) and the General Data Protection Regulation (GDPR). We are refining our internal processes on data in order to meet these new regulatory requirements. We are on course to implement one global approach to data management to ensure we maximise the potential of this key resource.

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 upon request and to allow their data to be directly transmitted to third parties. PSD2 meanwhile implies that banks must share customers' payments data – with the customer's explicit consent – with other regulated entities. You can read more in the 'Innovation and transformation' chapter.

ING believes customer data should be accessible in a similar manner for banks and non-banks. This should be adequately reflected in the EU's regulatory framework. The EU should consider expanding the open access regime pioneered by PSD2 to – in the first instance – financial services platforms, followed by other sectors to create a level playing field, while keeping strong safeguards for our customers, such as the GDPR, in place.

Regulatory developments

The Banks's IFRS 9 implementation was completed in the first quarter of 2018. The impact on ING Bank's CET1 ratio, taking into account the existing regulatory provision shortfall and before any transition relief, was a reduction of 20 bps. This was mainly caused by the change in the classification and measurement of a portion of the portfolio invested in liquid assets.

As of 1 January 2022, the first stage of Basel IV (revised Internal Rating-Based Approach) will come into effect. Based on the current estimates, without management actions this is expected to potentially increase RWA by roughly 15-18% on a fully loaded basis, of which around 80% is expected at implementation date.

Risk and capital management

Risk and capital management focuses on maintaining our risk profile within our risk appetite and strengthening our capital base. It allows ING to grow a sustainable business while implementing the Think Forward strategy. In a dynamic environment, ING continually develops its risk and capital management to address political and economic developments, changing customer behaviour, increasing regulatory requirements, emerging competitors and new technologies.

Capital developments at ING Bank

The capital position remained strong in 2018, resulting from profitable and growing operations, complemented by increased optimisation of the capital structure. ING has sufficient buffers to withstand certain adverse scenarios without breaching applicable requirements, at both the consolidated and subsidiary level. ING is confident this position will allow us to continue to successfully execute our Think Forward strategy support business growth and maintain our dividend policy.

The ING Bank's phased-in CET1 ratio at the end of the year decreased by 0.2 point from the previous year to 12.9%, as risk-weighted assets increased due to volume growth and model updates slightly offset by positive risk migration. The available CET1 capital decreased slightly by €0.2 billion compared with year-end 2017.

In 2018, a total of €4.7 billion of ING Bank N.V. Tier 2 bonds were redeemed and a total of €1.8 billion of Tier 2 bonds were issued by ING Groep N.V.

A consistent approach to capital management

ING Bank's overall approach to capital management is intended to ensure that capital is adequate to cover the (economic) risks at all levels and to ensure compliance with regulations. ING Bank constantly challenges capital positions at subsidiary levels to ensure its optimal use. The continued strength of ING's capital position, the adequacy of our financial position and our risk management effectiveness are essential in order to achieve our purpose to empower people and businesses to realise their goals, as well as to support ING's commercial activities, to pay dividends on common shares to shareholders and to invest in new technologies and best practices. In this way, ING aims to deliver shareholder returns while investing in the innovation of products and services.

Capital Management is tasked to optimise ING's capital and debt position in order to meet regulatory requirements, while supporting business growth, ensuring coupon payments and rewarding shareholders according to a progressive dividend policy. Optimising ING's capital allocation entails finding a balance between the forces governing supply and demand. The uncertainties surrounding these factors are a reflection of changing market circumstances and continuous unpredictability in regulatory and macroeconomic forces. The process of balancing these strategic goals is captured in the Internal Capital Adequacy Assessment Processes (ICAAP) Framework and is enabled by the building blocks and elements facilitating the internal adequacy and assessment process.

Funding & liquidity

The main objective of ING's funding and liquidity risk management is to maintain sufficient liquidity to fund ING's commercial activities under normal market circumstances and in times of stress across geographies, maturities and currencies. This requires a diversified funding structure, taking into consideration all relevant opportunities and constraints.

ING has a Funding & Liquidity (F&L) framework which aims to maintain sufficient liquidity under normal, adverse and stressed market circumstances. In general, ING considers the adequacy of its F&L position through three main lenses: (i) Stress, (ii) Sustainability and (iii) Regulatory. For each lens, ING has a set of risk appetite statements that underscore the bank's risk appetite profile commensurate with the principles for liquidity adequacy. These risk appetite statements are subsequently translated into a number of metrics with appropriate boundaries and instruments to measure and manage ING's F&L adequacy.

ING's funding consists mainly of retail and corporate deposits contributing 50% and 21% of the total funding at year-end 2018, respectively. These funding sources provide a relatively stable funding base. The remainder of the required funding is attracted by Group Treasury through long-term and short-term professional funding. Group Treasury manages the professional funding in line with risk appetite, ensuring sufficiently diversified and stable funding.

In 2018, customer lending growth outpaced customer deposit growth. As a result, the reliance on professional funding activities increased. As the share of customer deposits continued to provide an excess of stable funding, the additional lending growth was funded through short-term Certificates of Deposit and Commercial Paper (CD/CP) issuance.

Stress testing

Stress testing is an integral component of our risk and capital management framework. It allows us to (i) assess potential vulnerabilities in our businesses, business model, and/or portfolios; (ii) understand the sensitivities of the core assumptions in our strategic and capital plans; and (iii) improve decision making through balancing risk and return.

In addition to running internal stress test scenarios to reflect 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 the European Banking Authority (EBA) in cooperation with the European Central Bank (ECB), De Nederlandsche Bank (DNB), the European Commission and the European Systemic Risk Board (ESRB). The adverse stress test scenario was developed by the ECB and covers a three-year time horizon (2018-2020). The stress test was carried out applying a static balance sheet assumption as of December 2017, and therefore does not take into account current or future business strategies and management actions. The results also reflect the impact of IFRS 9 for determining loan loss provisions in adverse circumstances.

Managing risks to enable a sustainable business while strengthening culture and resilience

ING's business is managing risks every day. These include financial risks - we take on credit risk when we offer loans, guarantees and other products as part of our business model - market risk in our trading and banking book positions, and liquidity and/or funding risks through financial management.

Besides financial risks, ING is subject to non-financial risks associated with IT and cybersecurity, daily operations, compliance with laws and regulations, and adherence to socially accepted ethical norms. Non-financial risks can also arise through relationships with our clients, should issues emerge that are irreconcilable with our Environmental and Social Risk framework.

Risk management at ING is directed and overseen by the independent Risk Management function. The function's primary roles are to properly identify, measure and manage risks in normal and stressed economic conditions, and to oversee our business activities such that they are consistent with both our strategy and our risk appetite.

ING monitors its capacity to take risks through its Risk Appetite Framework. Within the framework, we monitor a range of financial and non-financial risk metrics to ensure that our risk profile is in line with our risk appetite. ING's risk appetite, which is approved by both the Supervisory Board and the Management Board Banking, defines our desired forward-looking risk profile, and informs the strategic and financial planning process. It is designed to be able to withstand market volatility and stress, while meeting regulatory requirements. This framework is complemented by a Non-Financial Risk Framework that includes compliance risk, operational risk and IT risk. Both frameworks, including underlying assumptions and metrics, are regularly reviewed such that they stay relevant in the ever-evolving finance environment. They combine various financial and non-financial risk disciplines into a single coordinated approach to provide the businesses with a clear overview of their risks and the way they are managed. This view allows the Management Board

Banking and senior management to form an opinion on the adequacy of internal risk management and control systems for the risks ING faces while pursuing the Management Board Banking's strategy. ING also has a process in place for the internal control over financial reporting.

While we are vigilant in our efforts to comply with applicable laws and regulations, it remains a significant operational challenge for banks to meet all these requirements within the strict timelines. ING faces the risk of failures in compliance, including in areas where the applicable regulations are unclear, subject to multiple interpretations or under development, are in conflict with each other, or where regulators revise their guidance or courts overturn previous rulings. Implementing the processes and procedures necessary for effective compliance has significant implications for IT systems and data, as people with the necessary knowledge and skills are scarce.

In the area of compliance risk, the Compliance Risk Management function has established a control framework based on laws and regulations, as well as on the standards for non-financial risk set out in ING's internal control framework. To support management in mitigating compliance risks, it trains and advises the business on the management of these risks. Topics include money laundering, terrorist financing, sanction and export control compliance, conflicts of interest, mis-selling, corruption, protection of customers' interests, the Foreign Account Tax Compliance Act (FATCA), the Common Reporting Standard (CRS), and US withholding tax and information reporting regulations.

Where an ING employee suspects any irregularity or misconduct within ING that leads to or could lead to a violation of ING's Orange Code, ING policies, such as anti-bribery and corruption policy, and/or any law, regulation or code, our Whistleblower Policy provides for anonymous reporting, via internal or external channels, alongside normal reporting channels. In 2018, ING recorded 75 alleged irregularities in accordance with its Whistleblower Policy, including 45 reports of suspected breaches of Orange Code or unethical behaviour.

To help us create a culture of integrity across the bank, we invite all employees to participate in our Promoting Integrity Programme (PIP), running since 2010. This global e-learning programme dives into dilemmas and issues that employees might face and aims to equip them to take the right decisions. In 2018, the PIP included the topics data and dilemma management. In 2019, we will revisit the set-up of the PIP. In addition, two online modules were launched to all staff: one to enhance awareness on KYC and a second one on whistleblowing.

In the Netherlands and Belgium we initiated 'i for integrity' in 2018, an approach aimed at strengthening a mind-set that puts integrity above all and embeds integrity in the organisation and our decision-making processes.

ING has designed controls to mitigate the compliance risks associated with the above-mentioned risk areas. Their effectiveness is tested periodically, and senior management is responsible for ensuring our processes comply with applicable laws and regulations, ING's internal policies and procedures and the Orange Code.

In connection with the introduction of the ING Way of Working, Operational Risk Management (ORM) and Information Risk Management (IRM) have established a new risk governance that adopts the ING Way of Working for non-financial risk (NFR) management within various entities. To enable business lines to manage their risks linked to the increased sourcing activities within ING, the sourcing policy has been updated to cover generic control objectives for mitigating and monitoring key risks. The integrated top-down/bottom-up emerging risk assessment identifies and monitors developments that may have an impact on ING's strategy and risk profile, like changes in the global environment, customer needs and expectations, local/global regulatory requirements and the effectiveness of our response to technological developments.

Further, ING is vitally dependent on its IT infrastructure for the reliability and continuity of its operations. Although IT and digitalisation are seen as opportunities for ING to distinguish itself from competitors, they also present risks. In 2018, ING continued to focus strongly on managing its IT risk exposure. ING aims to further increase the efficiency and effectiveness of our IT infrastructure and the reliability and continuity of IT processing.

Data is everywhere, in both digital and non-digital form. With cybercrime and data management a continuing threat to companies in general and to financial institutions in particular, ING has set minimum standards for platform security, data management, cybercrime resilience and security monitoring, as well as for identity and access management that the right people have the right access to the right resources at the right time.

User Access Management (UAM) remains an important element of our control framework to mitigate unauthorised and/or inappropriate access to our data and information. ING is building on its cybercrime resilience, further enhancing the control environment to protect, detect and respond to e-banking fraud, DDoS and targeted attacks.

ING's most important risks and control measures are regularly reported to and discussed by the Risk Committee of the Supervisory Board. Both financial and non-financial risk reports are reviewed in detail, including the status of ING's metrics with regard to solvency, liquidity, funding, credit, market risk and non-financial risks. In 2018, as part of this process, the Risk Committee and the full Supervisory Board spent considerable time discussing among others improvement in the bank-wide Know Your Customer Enhancement Programme.
In addition, the design and operation of the Risk Appetite Framework and the Non-Financial Risk Framework are discussed annually with the Risk Committee and the full Supervisory Board. The design and operation of internal controls over financial reporting are discussed annually with the Audit Committee and reported to the Supervisory Board.

Three lines of defence

ING's risk and control structure is based on the three lines of defence model. This model aims to provide a sound governance framework for risk management by defining and implementing three different risk management layers with distinct roles, responsibilities, and oversight.

The heads of ING's lines of business and their delegates form the first line of defence and have primary accountability for the performance, operations, compliance and effective control of risks affecting their respective businesses. They originate loans, deposits and other products within applicable frameworks and limits, they know our customers and are best positioned to act in both the customers' and ING's best interest. The COO is responsible and accountable for proper security and controls on both local and global applications and IT-platforms servicing the bank.

The independent risk management departments, headed by the chief risk officer (CRO), act as a second line of defence. As a member of the Management Board Banking, risk remains a continuing topic for the leadership team. The second line of defence's role is to properly identify, measure, manage and report risks. In order to achieve that goal, the second line develops policies and guidelines, implements and operates control frameworks, and decides on risk acceptance. It also aims to achieve compliance with internal and external requirements on an individual and consolidated basis. Furthermore, the second line supports the commercial departments and acts where necessary to keep the risk profile within the defined risk appetite.

Corporate Audit is our third line of defence. It provides an independent assessment of the 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.

We believe this set-up facilitates the overall risk and control environment. Together with a governance process using business and Group level risk committees, the Management Board Banking receives regular information about the risk profile of ING Bank.

Risk
Risk appetite
ING's risk governance framework

Governance
Three lines of defense

Business lines
Business line managers have primary responsibility for day-to-day risk management

Risk
- Formulates and implements policies and procedures, sets limits and risk appetite
- Executes transaction approval processes with veto
- Oversees, challenges and supports the optimisation of risk/reward trade-off

Audit
Independent and objective assurance of the overall effectiveness of internal controls

Execution
Value creation / risk taking
Alignment between risk taken and the risk appetite

Enhancing our risk governance

In September 2017, the European Banking Association (EBA) published new guidelines on internal governance for banks. These internal governance guidelines, which came into effect on 30 June 2018, include requirements for sound risk management across the three lines of defence. Following discussions with the ECB, ING was asked to secure the autonomy of its compliance function in line with these requirements. This entailed the separation of the Compliance function from the NFR department. The chief compliance officer (CCO) is now responsible solely for the compliance function across the entire institution. The CCO is a permanent member of the Supervisory Board's Risk Committee and continues to report directly to the CRO. Accordingly, a new head of NFR has been appointed covering ORM, IRM and Corporate Special Investigations (CSI), also reporting directly to the CRO. The split between Compliance and NFR became effective as of 1 July 2018.

In August 2018, the new global Centre of Expertise Behavioural Risk was formed to carry out behavioural risk assessments to identify, analyse and mitigate behaviours within our organisation that could negatively impact ING's reputation and performance. The team will provide management with specific direction on how to change these behaviours. Behavioural risk is complex and less tangible than other types of risks. Detecting and reducing high-risk behaviours requires a deep understanding of the drivers of such behaviours.

Risk developments in 2018

In 2018, the macroeconomic environment was defined by uncertainty related to the Brexit negotiations, the economic and geo-political situation in Turkey leading to among others the depreciation of the Turkish lira, the looming trade war between the US and China, and growing nationalism throughout Europe. The bank also continued to operate in a low interest rate environment that has put pressure on net interest margins. Additionally, shifts in societal norms relating to climate change and sustainability have driven new initiatives and policy updates within the bank.

As of 1 January 2018, ING transitioned to reporting non-performing loans (NPLs) and provisions under the IFRS 9 methodology. The Stage 3 credit-impaired assets and the Stage 3 ratio (Stage 3 credit-impaired assets expressed as a percentage of total credit outstandings) have replaced the NPL and the NPL ratio. Therefore, the comparative figures for the credit outstandings and the opening balance for the provisions have been adjusted. In 2018, ING Bank's Stage 3 ratio improved to 1.5% from 1.8% at the beginning of the year. The Stage 3 credit-impaired outstandings decreased, particularly within Retail in the Netherlands and industry lending, whereas the total credit outstandings went up year-on-year. On a portfolio level, improvements were observed in residential mortgages and business lending both in the Netherlands, where the Stage 3 ratio decreased to 0.7% from 1.0% and 4.7% from 6.2%, respectively, reflecting the positive macroeconomic environment. Within industry lending, the Stage 3 ratio for Project and Asset-based Finance and Real Estate Finance dropped by 0.8 percentage points to 1.5% and 0.8 percentage points to 1.2% respectively following restructuring and repayments of some larger files. Overall, ING Bank's Stage 3 ratio remained low, with relatively limited impact from the events in Turkey. The stock of provisions decreased by €0.9 billion to €4.6 billion mainly due to reclassification of the Italian general lease run-off portfolio to assets held for sale, higher write offs and exchange rate movements following the depreciation of the Turkish lira in Stage 3 files, and a positive trend of the asset quality in the Stages 1 and 2. ING Bank's Stage 3 provision coverage ratio decreased to 30.6 from 34.6% at the beginning of the year. ING Bank's loan portfolio consists predominantly of asset-based and secured loans, including residential mortgages, Real Estate Finance, and project-based finance.

The fifth Anti-Money Laundering Directive (5th AMLD) was adopted by the EU Parliament on 19 April 2018 and published in the EU Official Journal on 19 June 2018. EU member states have to transpose the 5th AMLD into their local laws and regulations by 10 January 2020. The main changes brought by the 5th AMLD: (i) enhance the powers of EU financial intelligence units and facilitate increased transparency regarding who really owns companies and trusts by establishing beneficial ownership registers; (ii) prevent risks associated with the use of virtual currencies for terrorist financing and limit the use of prepaid cards; (iii) improve the safeguards for financial transactions to and from high-risk third countries; (iv) enhance the access of financial intelligence units to information, including centralised bank account registers; (v) ensure centralised national bank and payment account registers or central data retrieval systems in all member states.

Financial economic crime/KYC

In September 2018, ING was impacted by the €775 million settlement agreement with the Dutch Public Prosecution Service related to the previously disclosed criminal investigations that found serious shortcomings in the execution of customer due diligence requirements to prevent financial economic crime at ING Netherlands in the period investigated (2010-2016). Read more on ing.com

The implementation and execution of policies and procedures related to anti-money laundering (AML) is an ongoing activity. In addition, ING has taken a number of specific measures to strengthen its management of compliance risks and address the root causes of the shortcomings. These measures are being implemented as part of the bank-wide, global Know Your Customer (KYC) Enhancement Programme, a multi-year improvement programme with integral steering. This specific programme was officially launched early in 2017 and is expected to run until end-2020. ING is committed to periodically providing the Dutch central bank (DNB) with regular updates on the progress made.

The KYC Enhancement Programme encompasses all client segments in all ING business units, leveraging on experiences from the enhancement programme already started in the Netherlands. The programme consists of three parts: (a) look-back analysis on past deficiencies in post-transaction monitoring. The look-back analysis consists of screening of transactions executed in the past. In case unusual transactions are identified, ING is committed to following the applicable reporting process; (b) enhancement of customer due diligence files with the aim to document sufficiently the knowledge the bank has about its clients in the line with past and new requirements; (c) structural solutions that should support getting sustainably better in addressing money laundering risks in our portfolio and complying with laws and regulations.

The structural solutions comprise five pillars:

- **Development and global roll-out of KYC risk appetite statements, KYC risk assessments on clients capability structure and maturity assessments.** Setting acceptance criteria based on which clients are on-boarded, transactions are processed or taxes are withheld. This pillar covers also the use of a uniform risk assessment methodology for KYC-related integrity risks and a common taxonomy to measure effectiveness.

- **Development and global roll-out of a bank-wide KYC digital service platform, including processes and tooling around CDD, screening and workflow management.** This includes the fulfilment of the client acceptance and maintenance life cycle within one global digital platform. All required screening components (name screening, pre-transaction screening, adverse media screening) will be incorporated into the client acceptance due diligence process. Once a customer is onboarded, ongoing screening and monitoring of transactions can then be activated.

- **Translation of 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 (FEC) and client activity monitoring (CAM) scenarios per entity, the building of the alert definitions (including data feeds) and migration to a central tool where relevant and possible, and validating and testing the approach from risks to alerts.

- **Set up central KYC organisation that defines standards and drives global execution and improvements**. This includes the set-up of the new KYC organisation now in place. As of 4Q 2018, we have strengthened the KYC governance by including the heads of the business lines in the KYC Committee. Going forward we will further develop the global KYC function to ensure structural embedding of standardised and uniform ways of working, with regular improvement cycles and support of advanced technologies and insights.

- **Develop and rollout KYC communication and awareness initiatives and set up a behavioural risk department that performs risk assessments.** In its internal communications, ING has made it clear that non-financial risk and compliance are just as important as financial risk and need to be embedded in ING's DNA. An online training module to enhance awareness of KYC was rolled out to all employees worldwide. MBB members spent a considerable amount of time engaging with staff to explain and discuss our responsibility as gatekeepers of the financial system. In these meetings, the impact of the settlement, the root causes, the shortcomings and our commitment and efforts to enhance were discussed. ING started behavioural risk assessments during which more than 100 interviews were held and more than 200 surveys were done to understand better how people, teams and departments interact and work together. Based on these insights, actions for improvement will be considered.

ING recognises that fighting Financial Economic Crime requires close cooperation with other banks and supervisory and regulatory authorities. ING is therefore working with the Dutch Banking Association (NVB) and the Dutch central bank (DNB) on harmonising efforts in the fight against FEC and participates actively in various working groups and project teams in this area. As such, ING actively participates in public-private partnerships to combat FEC, such as participating in the FEC Council PPS ('FEC-RAAD Public Private Cooperation') in which Dutch authorities and financial institutions cooperate on supervision, control, prosecution or investigation with financial sector parties to strengthen the integrity of the sector. This is done by means of preventative action to identify and combat threats to integrity. ING believes that introducing clear accountabilities and standard processes across the financial industry will allow ING to manage and control KYC activities and integrity risks more effectively.

As previously noted, in connection with the above-mentioned investigations ING also received information requests from the US Securities and Exchange Commission (SEC). ING has received a formal notification from the SEC that it has concluded its investigation and, based on the information at that time, the Division of Enforcement does not intend to recommend SEC enforcement action against ING.

Composition of the Management Board Banking and Supervisory Board

Management Board Banking

Composition on 31 December 2018

- R.A.J.G. (Ralph) Hamers (52)
  CEO, chairman of Management Board Banking
- J.V. (Koos) Timmermans (58)[1]
  CFO, Vice-chairman
- S.J.A. (Steven) van Rijswijk (48)
  CRO, Management Board Banking
- M.I. (Isabel) Fernandez Niemann (50)
  Head of Wholesale Banking
- R.M.M. (Roel) Louwhoff (53)
  COO/CTO, Management Board Banking
- (Aris) Bogdaneris (55)
  Head of Challengers & Growth Markets
- R.B. (Roland) Boekhout (55)
  Head of Market Leaders

1 Please note that Koos Timmermans stepped down from his position as CFO and member of the Executive Board and Management Board Banking of ING. He was succeeded by Tanate Phutrakul, who was appointed as CFO and member of the Management Board Banking effective 7 February 2019.

Supervisory Board

Composition on 31 December 2018

G.J. (Hans) Wijers (67) - Chairman
H.J.M (Hermann-Josef) Lamberti (62) - Vice-chairman
J.P. (Jan Peter) Balkenende (62)
E.F.C.B. (Eric) Boyer de la Giroday (66)
H. W. (Henk) Breukink (68)
M. (Mariana) Gheorghe (62)
M. (Margarete) Haase (65)
R.W.P. (Robert) Reibestein (62)

Committees of the Supervisory Board

Composition on 31 December 2018

Audit Committee

H.J.M (Hermann-Josef) Lamberti - Chairman
E.F.C.B. (Eric) Boyer de la Giroday
M. (Margarete) Haase
G.J. (Hans) Wijers
R.W.P. (Robert) Reibestein

Risk Committee

R.W.P. (Robert) Reibestein - Chairman
J.P. (Jan Peter) Balkenende
E.F.C.B. (Eric) Boyer de la Giroday
M. (Mariana) Gheorghe
H.J.M (Hermann-Josef) Lamberti

Remuneration Committee

H. (Henk) Breukink - Chairman
R.W.P. (Robert) Reibestein
G.J. (Hans) Wijers

Nomination and Corporate Governance Committee

G.J. (Hans) Wijers - Chairman
H. (Henk) Breukink
M. (Mariana) Gheorghe

Corporate Governance

This chapter, including the parts of this Annual Report incorporated by reference, with the separate publication of 'ING's application of the Dutch Banking Code' dated 4 March 2019, (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 Banking Code

The Dutch Banking Code, as revised in 2014, is applied by ING Bank N.V. The Banking Code can be downloaded from the website of the Dutch Banking Association (www.nvb.nl). Its application to ING Bank is described in 'Application of the Dutch Banking Code by ING Bank N.V.', available on the ING Group website (www.ing.com). This is to be read in conjunction with and deemed to be incorporated in the Annual Report of ING Bank N.V.

Financial reporting process

As ING Bank N.V. is a consolidated subsidiary of ING Groep N.V. ('ING Group') its policies and procedures for establishing and maintaining adequate internal control over financial reporting are the same as those applied by ING Group for its consolidated financial statements with respect to ING Bank N.V. and the entities included in the latter's own consolidated financial statements.

1 Dutch Bulletin of Acts (Staatsblad) 2004, 747, most recently amended with effect from 1 January 2018: Dutch Bulletin of Acts 2017, 332.

ING's internal control over financial reporting is a process designed under the supervision of our principal executive and principal financial officers 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.

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 assesses 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).

Board composition

ING Bank aims to have an adequate and balanced composition of its Management Board. Thereto, annually, the Supervisory Board assesses the composition of the Management Board. In the context of such assessment, ING Bank aims to have a gender balance by having at least 30 percent men and at least 30 percent women amongst its Management Board members. However, because of the fact that ING Bank needs to balance several other relevant selection criteria when composing its Management Board, the composition of the Management Board did not meet the abovementioned gender balance in 2018 (14 percent women). ING Bank will continue to strive for an adequate and balanced composition of its Management Board in future appointments, by taking into account all relevant selection criteria including but not limited to gender balance, executive experience, experience in corporate governance of large stock-listed companies and experience in the political and social environment.

Changes in the composition

As announced on 4 December 2018, Tanate Phutrakul was appointed as CFO and member of the Management Board Banking, succeeding Koos Timmermans on 7 February 2019. The Supervisory Board will nominate Tanate Phutrakul for appointment as a member of the Executive Board of ING Group at the Annual General Meeting on 23 April 2019. The appointments have been approved by the European Central Bank ('ECB').

Information on members of the Management Board Banking

R.A.J.G. (Ralph) Hamers member and Chairman Management Board

(Born 1966, Dutch nationality, male; appointed in 2013)
Ralph Hamers was appointed a member of the Executive Board of ING Group on 13 May 2013. On 1 October 2013, he was appointed CEO and Chairman of this Board and of the Management Board Banking. Ralph Hamers joined ING in 1991. Before his appointment to the Executive Board, he was CEO of ING Belgium and Luxembourg.

Relevant positions pursuant to CRD IV[2]

CEO and Chairman of the Management Board Bankingof ING Bank N.V. and the Executive Board of ING Groep 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 of Foundation Royal Concertgebouw Orchestra Amsterdam and member of UNICEF's Global Board of the Young People's Agenda .

J.V. (Koos) Timmermans, Chief Financial Officer ('CFO') and vice-chairman

(Born 1960, Dutch nationality, male; appointed in 2011 and stepped down on 7 February 2019)
Koos Timmermans was appointed as vice-chairman of the Management Board Banking as of 1 October 2011 and appointed as CFO since 8 May 2017. From 1 October 2014, Koos Timmermans has, in addition to his current tasks which include aligning ING Bank's activities and the balance sheet with new and upcoming regulation, also assumed responsibilities for the Bank's operations in the Benelux and ING's sustainability department.

Relevant positions pursuant to CRD IV

Vice-chairman and CFO of the Management Board Banking of ING Bank N.V. and of the Executive Board of ING Groep N.V., member of the Management Board of ING Support Holding B.V. and member of the Supervisory Board of Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. ('FMO', Entrepreneurial Development Bank)

2 The fourth EU Capital Requirements Directive 2013/36/EU

Other relevant ancillary positions

Member of the Supervisory Board Stadsherstel Amsterdam N.V. and member of the Supervisory Board of Amsterdam Institute of Finance.

S.J.A. (Steven) van Rijswijk, member and Chief Risk Officer ('CRO')

(Born 1970, Dutch nationality, male; appointed in 2017)

Steven van Rijswijk has been a member of the Management Board Banking since 8 May 2017. He was appointed CRO on 1 August 2017. He is also a member and CRO of the Executive Board of ING Groep N.V. Before becoming a member of the Management Board Banking, Steven van Rijswijk 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. Steven van Rijswijk 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 Management Board Banking of ING Bank N.V. and of the Executive Board of ING Groep N.V.

R. (Roland) Boekhout, member and head of Market Leaders

(Born 1963, Dutch nationality, male; appointed in 2017)
Roland Boekhout was appointed a member of the Management Board Banking since 8 May 2017. He is also head of Market Leaders. As head of Market Leaders, he is responsible for ING Bank's operations in the Benelux, and the intended integration of ING's banking platform in the Netherlands and Belgium. In addition, he is responsible for Advanced Analytics. Furthermore, he is a non- executive director of ING Belgium N.V./S.A.

Roland Boekhout holds a master's degree in business economics from Erasmus University Rotterdam, the Netherlands.

Relevant positions pursuant to CRD IV

Member of the Management Board Banking of ING Bank N.V. and Non-Executive Director of ING Belgium N.V./S.A.

Other relevant ancillary positions

Member of the board of (Vorstandsmitglied) of the Deutsch-Niederländische Handelskammer, member of the Euronext advisory board, member of the advisory council of the Maatschappelijke Alliantie (the Netherlands), chairman of the Supervisory Council ING Netherlands and chairman of Stichting ING Nederland Fonds (foundation) and member of the management board of the Netherlandse Vereniging van Banken (NVB).

A. (Aris) Bogdaneris, member and head of Challengers & Growth Markets

(Born 1963, Canadian nationality, male; appointed in 2015)
Aris Bogdaneris was appointed a member of the Management Board Banking on 1 June 2015. He is also head of Challengers & Growth Markets, responsible for all markets where ING is active in both retail and wholesale banking outside the Benelux.

Prior to this appointment, Aris Bogdaneris was a member of the Management Board Banking responsible for Retail Banking at Raiffeisen Bank International as well as Chief Operating Officer overseeing Information Technology and Operations/Shared Service Centers.

Relevant positions pursuant to CRD IV

Member of the Management Board Banking of ING Bank N.V., member of Management Board of ING Bank (Australia) Ltd and member of the Supervisory Board of ING DiBa.

M.I. (Isabel) Fernandez Niemann, member and head of Wholesale Banking

(Born 1968, Spanish Dutch nationality, female; appointed in 2016)
Isabel Fernandez Niemann was appointed a member of the Management Board Banking as from 1 September 2016. She is also head of Wholesale Banking as from 1 November 2016. Prior to her appointment Isabel Fernandez Niemann was Global Commercial Leader and Head of Sales for General Electric.

Relevant position pursuant to CRD IV

Member of the Management Board Banking of ING Bank N.V.

Other relevant ancillary positions

Member of the board of Stichting het Nationale Ballet Fonds and member of the Supervisory Council ING Netherlands

R.M.M. (Roel) Louwhoff, member and COO Management Board

(Born 1965, Dutch nationality, male; appointed in 2014)
Roel Louwhoff was appointed a member and chief operations officer (COO) of the Management Board Banking on 1 May 2014. He was also appointed Chief Transformation Officer (CTO) per 1 October 2016. In this role, that he fulfils alongside his COO role, he is responsible for operations of the bank-wide transformation that was announced in 2016. Roel Louwhoff is responsible for Operations, IT (including standardisation), data management, information security, process management and procurement. Prior to this appointment, Roel Louwhoff was CEO of BT Operate.

Relevant position pursuant to CRD IV

Member of the Management Board Banking of ING Bank N.V.

Supervisory Board

ING Group needs to balance several relevant selection criteria when composing its Supervisory Board but strives for an adequate and balanced composition thereof, by taking into account all relevant selection criteria including, but not limited to experience in retail and wholesale banking, gender balance, executive experience, experience in corporate governance and experience in the political and social environment.
The Nomination Committee assesses the composition of the Supervisory Board, annually. In the context of such assessment, ING Group aims to have a gender balance by having at least 30 percent men and at least 30 percent women amongst its Supervisory Board members. Margarete Haase was appointed as a member of the Supervisory Board at the General Meeting of 2017 and per 1 October 2017 she has been present as an observer at the meetings of the Supervisory Board. Her appointment became effective on 1 May 2018. The percentage of females within the Supervisory Board in 2018 is 25 percent. Further measures are being taken to ensure the preferred composition in terms of gender as soon as reasonably possible.

Ancillary positions

Member of the Supervisory Board may hold various other directorships, paid positions and ancillary positions and are required to provide details on these. 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 Bank N.V. It is the responsibility of the individual member of the Supervisory Board to ensure that the directorship duties are reported and performed properly and are not affected by any other positions that the individual may hold outside ING Bank N.V.

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

Member of the Supervisory Board of ING Groep N.V./ING Bank N.V., chairman of the Supervisory Board and chairman of the Preparatory Committee and Selection & Appointment Committee of Heineken N.V. and member of the Supervisory Board of Hal Investments Plc.

Other relevant ancillary positions

Chairman of the Supervisory Board of Het Concertgebouw N.V., chairman of the board of Vereniging Natuurmonumenten (the Netherlands) 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 S.A./N.V.

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.

H.W. (Henk) Breukink

(Born 1950, Dutch nationality, male; appointed in 2007, term expires in 2019)
Former position: managing director of F&C and country head for F&C Netherlands (asset management firm).

Relevant positions pursuant to CRD IV

Member of the Supervisory Board of ING Groep N.V./ING Bank N.V., non-executive director of Brink Groep B.V. and executive director of Executive Development Dialogue B.V.

M. (Mariana) Gheorghe

(Born 1956, Romanian nationality, female, appointed in 2015, term expires in 2019)
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.

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.

R.W.P. (Robert) Reibestein

(Born 1956, Dutch nationality, male; appointed in 2012 as an observer, full member as of 2013, term expires in 2021)
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 position

Member of the Supervisory Board of Stichting World Wildlife Fund (the Netherlands).

Changes in the composition

Jeroen van der Veer resigned from the Supervisory Board. As chairman, he was succeeded by Hans Wijers.

Conformity statement

The Management Board Banking is required to prepare the Annual Accounts and the Annual Report of ING Bank 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 Management Board Banking 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 Management Board Banking, 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 Bank N.V. 2018 Annual Accounts give a true and fair view of the assets, liabilities, financial position and profit or loss of ING Bank N.V. and the enterprises included in the consolidation taken as a whole; and
- the ING Bank N.V. 2018 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 2018 of ING Bank N.V. and the enterprises included in the consolidation taken as a whole, together with a description of the principal risks ING Bank N.V. is being confronted with.

Amsterdam, 4 March 2019

The Management Board Banking

R.A.J.G. (Ralph) Hamers
CEO, chairman of the Management Board Banking

T. (Tanate) Phutrakul
CFO and vice-chairman

S.J.A. (Steven) van Rijswijk
CRO

R. (Roland) Boekhout
Head of Market Leaders

A. (Aris) Bogdaneris
Head of Challengers & Growth Markets

M.I. (Isabel) Fernandez Niemann
Head of Wholesale Banking

R.M.M. (Roel) Louwhoff
COO/CTO

Report of the Supervisory Board

The Supervisory Board and its committees focused in 2018 on overseeing and challenging ING's management in their efforts to advance the Think Forward strategy in areas like beyond banking services and developing a platform approach. Other important topics of attention for the Supervisory Board in 2018 were the Executive Board remuneration policy, the investigation by Dutch authorities and the EBA Guidelines on Internal Governance.

The Supervisory Board met 10 times in 2018. 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 oversee ING's affairs. As of 2018 onwards all outside positions of the members are collectively discussed on an annual basis, among others to safeguard continuation of such engagement.

The Management Board Banking was 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 addressed. The Supervisory Board also had sessions with Supervisory Board members only, in advance of the regular Supervisory Board meetings and 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 without the attendance of the Management Board Banking. The Supervisory Board prioritises striking a balance between the interests of all stakeholders and maintaining an open dialogue with all departments within ING.

Besides the Executive Board remuneration policy and the investigation by the Dutch authorities, the Supervisory Board's main focus areas were the further acceleration of the Think Forward strategy, including the various transformation initiatives and partnering with fintechs, the anticipated impact of Basel IV and Brexit, updates on IFRS 9, the financing of the company in accordance with our capital and liquidity adequacy (in line with our annually updated Risk Appetite Framework), dividend capacity, thematic reviews in connection with several regulatory requests, and updates on supervisory developments.

Please refer to the legal proceedings paragraph set out in Note 44 to the consolidated annual accounts of ING Bank for more information.

SB Attendance 2018[1]

	SB	RiCo	AC	NCGcom	RemCo
Wijers (chairman)	9/10	-	5/5	10/10	7/7
Lamberti (vice-chairman)	9/10	4/6	4/5	-	-
Balkenende	10/10	6/6	-	-	-
Boyer	8/10	6/6	5/5	-	-
Breukink	10/10	-	-	9/10	6/7
Gheorghe[2]	10/10	6/6	-	5/5	-
Haase[3]	6/6		3/3		
Reibestein	10/10	6/6	5/5	-	6/7
Total attendance[4]	**95%**	**93%**	**95%**	**93%**	**92%**

1 This SB attendance overview only shows the regular SB (committee) meetings that took place during the year. The 2018 additional and ad-hoc SB (committee) meetings specifically relating to the EB remuneration policy and the investigation by the Dutch authorities are not taken into account in this overview for comparison purposes with previous years.
2 Gheorghe became a member of the NCGcom as per the end of the 23 April 2018 AGM.
3 Haase's membership of the AC and the SB became effective on 1 May 2018. Before this date she was present at these meetings as an observer.
4 The figures 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 on these in advance.

The continuing dialogue between ING and external supervisors was a standard agenda item throughout the year. Furthermore, the Supervisory Board exercised its oversight role to ensure necessary actions cascaded down into the organisation and were followed up, including those related to culture and behaviour. Hans Wijers took over the chairman's role from Jeroen van der Veer in May 2018 after the 2018 Annual General Meeting. In this role he has had conversations with various internal and external stakeholders, including employees, the Central Works Council and government officials. In December 2018 he also participated in a governance roadshow with some of our institutional investors.

CEO compensation

The Supervisory Board noted the reactions of various Dutch stakeholders following the proposal to amend the Executive Board remuneration policy, as set out in the Annual Report 2017 and as initially tabled for the 2018 Annual General Meeting, to bring the remuneration for the CEO position closer to peers within the Euro Stoxx benchmark. In light of this, the Supervisory Board reconsidered the proposal and decided not to put it up for a vote at the Annual General Meeting. The Supervisory Board regrets the loss of trust and damage to ING's reputation caused by this proposal. This was discussed at length during the 2018 Annual General Meeting. The Supervisory Board evaluated the decision-making process, supported by an ad hoc Supervisory Board committee. The Supervisory Board is now performing an extensive review of ING's remuneration policy. This comprehensive review will be performed by the Supervisory Board in consultation with its advisory bodies with significant emphasis on broad stakeholder engagement.

Settlement agreement

ING announced on 4 September 2018 that it had reached a settlement agreement with Dutch authorities related to an investigation that found serious shortcomings in the execution of customer due diligence and requirements related to fighting financial economic crime. In light of the investigation the Supervisory Board, supported by external legal counsel and subject-matter experts, had numerous internal ad hoc meetings and several meetings with external parties that resulted in said agreement on 3 September 2018. As part of the process, the Supervisory Board also performed a management assessment for the persons in scope covering the period 2010-2016 with subsequent necessary measures taken. Looking forward, the Supervisory Board, Executive Board and Management Board Banking reconfirmed their commitment to comply with applicable legal requirements and take the necessary actions to strengthen compliance risk management and the culture of compliance throughout the organisation.

Appointment CFO

In addition, following the settlement 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. 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 has nominated Tanate Phutrakul for appointment as a member of the Executive Board of ING Group, subject to shareholder approval at the Annual General Meeting on 23 April 2019. The appointments have been approved by the European Central Bank.

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 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, that took place on 10-12 January 2018 in Frankfurt and that were combined with regular SB meetings, focused on gaining more insight into Germany's economy and financial landscape. There was also a 'deep dive' into the current business and activities of ING in Germany, also covering our presence in Austria and the Czech Republic, and how these relate and contribute to ING's Think Forward strategy. As part of the annual business visit, the Supervisory Board together with the Management Board Banking visited the offices of ING in Milan and Madrid in September 2018. The visits allowed the SB to get a better understanding of local business issues. There was also a special focus on Model Bank, the integrated banking platform being designed to offer a consistent experience across multiple ING markets.

Throughout the year, a number of other educational sessions on specific topics were organised for and at the request of the Supervisory Board, including some covering regulatory requirements. Topics included the 2018 EBA stress test, the bank's changing competitive landscape and partnering with fintechs, ING's position on crypto currencies and tokens, pro-active balance sheet management, risk modelling, the pricing process , data ethics/security, dilemma management, the Organisational Health Index, ING's global job evaluation framework, and performance management and remuneration practices. These educational sessions and visits also provided opportunities for Supervisory Board members to interact with senior management in speed-meet sessions. These conversations contribute to 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 2018, ING continued to work on implementing its Think Forward strategy focused on long-term value creation and based on 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 strategy (accelerate Think Forward), focusing on investing in our digital transformation, creating a scalable banking platform and realising €900 million of gross costs savings by 2021. 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 2018, the Supervisory Board discussed the progress of the strategy and its transformation programme and, as part of this, had an active dialogue with the Management Board Banking.

ING's strategy, together with the transformation programme, includes an overarching view and a number of initiatives to further improve the customer experience, earn primary customers, develop analytics 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 whilst growing our lending capabilities. As part of this, platform thinking was an important theme in 2018, with 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. Other aspects of the accelerated strategy programme were discussed and approved. Important drivers of the programme were addressed, such as the future of banking, the journey of convergence, maintaining commercial momentum, how to fund and drive the transformation and risk management. 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 Management Board Banking has prepared the annual accounts and discussed these with the Supervisory Board. The annual accounts will be submitted for adoption at the 2019 Annual General Meeting as part of the 2018 Annual Report.

The quarterly results were discussed and approved in January, May, July/August and October 2018, including the relevant press releases,. The full-year 2017 financial results were approved in March 2018. Also discussed were the Management Board Banking's assessment of the adequacy and effectiveness of the risk management and control. ING Bank paid € 2,517 million dividend to ING Groep N.V.

The Supervisory Board approved the annual review of the risk appetite framework that reflects recent changes in regulatory requirements. This included updates to the solvency risk appetite statements (RAS), liquidity and funding RAS and concentration RAS. 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 Brexit, 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, in its role as ING's external auditor, audited ING's 2018 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 approved 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 have become shorter 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 2018 (with the CEO in attendance, except when the annual self-evaluation of the Supervisory Board or matters concerning the CEO were discussed), the Management Board Banking performance assessments were discussed and approved. Furthermore the Management Board Banking annual targets were reviewed and approved. The future composition of the Management Board Banking (including the appointment of a new CFO), and the Supervisory Board, its committees and potential candidates were a recurring topic 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. Action points from last year's self-assessment were acted on during the year, covering: attention to the future composition of the Supervisory Board, the aim to have fewer presentations and more interactive discussions between the Supervisory Board and the Executive Board and Management Board Banking, to balance the amount of pre-readings and time spent, to consider competitor strategies and to develop a more balanced offering of deep dives/permanent education sessions.

As in previous years, the Supervisory Board conducted its annual self-assessment, facilitated by an independent external party and with input from several executives who regularly interact with the Supervisory Board and attend Supervisory Board meetings. In general, the performance of the Supervisory Board and its committees was considered to be stable since previous year's self-assessment, acknowledging that the environment in which the Supervisory Board was operating had become more challenging, among others with reference to the 2018 events in light of CEO remuneration and the settlement.

Standard areas of attention of the Supervisory Board will be continued close monitoring and assessment of the developments in the areas of non-financial risk, compliance and internal control, as well as in the regulatory and external supervision landscape.

The Supervisory Board's spearheads for 2019 will be to improve stakeholder management, focus on the way forward by means of reinstating trust with customers and other stakeholders and pride with employees to be part of ING, and achieving the right balance between the provision of challenge/counterbalance and support to the Executive Board and the Management Board Banking - particularly in the areas of compliance and performance management, with clear set priorities and milestones.

Following the discussions on the self-assessment in February 2019, a number of suggestions were made as key priorities for improving the performance of the Supervisory Board over the coming year, such as continued interaction with stakeholders outside and senior management within the organisation. With regard to the Supervisory Board's meeting effectiveness focus will be on an improved balance between presentation and discussion, in favour of the latter, supported by document quality assurance and gathering feedback on meeting performance.

Audit Committee meetings

The Audit Committee met five times in 2018. On average, 95 percent of the members were present at the scheduled meetings. The Audit Committee discussed the quarterly results, the interim accounts and the annual accounts. 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, auditor's 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, 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 IFRS-related developments and their potential impact on our disclosures, legal proceedings, the remediation of open-control deficiencies in areas including user access and change management and loan-loss provisioning. Also addressed were non-financial risks relevant for the financial reporting, and the results of the financial control enhancement programme. While the programme was completed, the efforts to embed control more in the daily business continue to be part of ING's business-as-usual-activities. Also the settlement with the Dutch authorities, as well as the related information request from US authorities, regarding various requirements related to client on-boarding, money laundering and corrupt practices were 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 and made recommendations to the Supervisory Board regarding the nomination of the external auditors for the years 2020-2023. 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 head of the internal audit department, with the CFO and with the Group Controller. He also met with various senior managers.

Risk Committee meetings

The Risk Committee met six times in 2018, compared with five times last year. 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 both the financial and non-financial risk reports were discussed, including the status of ING's metrics with regard to solvency risk, liquidity and funding risk, credit risk, country risk, market risk, non-financial risk and compliance risk. Stress-testing scenarios, including the impact of the 2018 EBA EU-wide stress test, were also discussed. Also the review of the Risk function was discussed. Furthermore, in 2018 the Risk Committee spent considerable time on discussing financial and non-financial risk, compliance risk, money laundering risk, including updates of the bank-wide Know Your Customer enhancement programme, and IT risk within risk appetite, GDPR/GDPP and MiFID II. The Risk Committee also spent considerable time, before the instalment of a special committee on the matter, on the investigation by the Dutch authorities, as well as the related information request from US authorities, regarding various requirements related to client on-boarding, money laundering and corrupt practices. Furthermore, the Risk Committee's feedback is also taken into account in discussions regarding remuneration policies – for examples as part of the Variable Remuneration Accrual Model, that was recently introduced.

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 clients and society at large.

A wide range of other topics were discussed, such as the annual review of the Risk Appetite Framework. As in 2017, the Risk committee held an additional meeting to allow it to deal with an increased number of high priority issues. During this extra meeting in 2018, the Risk Committee discussed several non-financial risk and compliance risk topics, including the know your customer policy and the implications for ING of the political and economic situation in Turkey.

Read more in the 'Risk Management' and 'Capital Management' note in the Annual Accounts.

Nomination and Corporate Governance Committee meetings

The Nomination and Corporate Governance Committee met 10 times in 2018. On average, 93 percent of the members were present at the scheduled meetings. The Nomination and Corporate Governance Committee discussed future succession planning for the Executive Board and the Management Board Banking, as well as the future composition of the Supervisory Board. Various diversity-related aspects were taken into account, such as 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. In order to meet the requirements of various stakeholders a diversity and competence matrix was further developed and published for the members of the Management Board Banking and Supervisory Board to show how these various elements are represented in the composition of these boards (see page 38).

Several potential (internal talents) were identified who have potential to assume more senior roles in the organisation in the future, taking ING's diversity policy (as published on www.ing.com) into account. With regard to the Supervisory Board, the Nomination and Corporate Governance Committee continued its search for suitable successors so as to maintain a balanced Supervisory Board composition, following the early resignation of Ann Sherry as Supervisory Board member in 2017 and with Henk Breukink's final term ending in 2019. 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.

The Nomination and Corporate Governance Committee has initiated a continuing conversation on Management Board Banking succession planning as part of its regular meetings by means of deep dives per function and business line. Focus areas included improving diversity at the higher management levels, senior management succession planning and accelerating refreshment. Attention was also paid specifically to regrettable losses among senior managers who left ING in 2018 for various reasons.

New this year were periodic conversations that took place outside regular meetings to consider talented ING employees with the potential of taking on more senior and complex roles over time. The approach and progress were shared with the Supervisory Board.

Special attention was paid to performance management and how to enhance the process and its effectiveness by fostering 'continuous conversation' between managers and employees throughout the year. In 2018, the committee discussed the agenda for the 2018 Annual General Meeting and the proposed topics for the 2019 Annual General Meeting, including the publication of the booklet on the application of the Dutch Corporate Governance Code and Dutch Banking Code. During the year, the committee also discussed the (implementation of the) EBA Guidelines on Internal Governance, including the required updates to the corporate board charters for ING in relation to these guidelines.

Remuneration Committee meetings

In 2018, the Remuneration Committee met seven times. On average, 92 percent of the members were present at the scheduled meetings. The Remuneration Committee, where necessary with input and advice from the Risk Committee following strengthened risk management governance, reviewed the thresholds above which the pool for variable remuneration may be used for actually granting variable remuneration. It discussed the variable remuneration pool and reviewed the performance assessment for the Executive Board and Management Board Banking, as well as the variable remuneration proposals. Also the Executive Board remuneration policy and CEO remuneration were discussed, including the follow-up actions resulting from the Supervisory Board's evaluation of the decision-making process after the item was withdrawn from the 2018 Annual General Meeting agenda. The remuneration proposals for Identified Staff were also reviewed, including potential cases for holdback of deferred compensation by way of malus. With regard to the investigation by the Dutch authorities, a special ad-hoc committee of the Supervisory Board was charged with the accompanying management assessment and its subsequent proposed measures, including those encompassing impact on remuneration. In addition, the proposed annual targets for the Executive Board and the Management Board Banking members were discussed. The ING Bank Remuneration Regulations Framework was updated as part of an annual review. This included the introduction of the Variable Remuneration Accrual Model. Throughout the year the Remuneration Committee approved Identified Staff/High Earner-related remuneration matters, based on ING's accompanying governance framework.

Composition of the Management Board Banking and Supervisory Board

At the Annual General Meeting on 23 April 2018, Eric Boyer de la Giroday was reappointed as Supervisory Board member. Furthermore, Jeroen van der Veer stepped down as Supervisory Board member as per the end of the 2018 Annual General Meeting following which Hans Wijers succeeded him as chairman. Margarete Haase's membership of the Supervisory Board became effective as per 1 May 2018, following the period from 1 October 2017 during which she was present as an observer at the meetings of the Audit Committee, Supervisory Board and Internal Supervisory Board. Read more in the 'Corporate governance' chapter on the composition of the Supervisory Board committees at year-end 2018.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.

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 2018. 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.

Furthermore, as mentioned earlier, on 7 February 2019 Tanate Phutrakul was appointed as CFO and member of the Management Board Banking, succeeding Koos Timmermans. The appointments have been approved by the European Central Bank.

Diversity and Competence Matrix (as at 31 December 2018)

Management Board			Diversity	Competencies				
Name	Year of birth	Gender	Nationality	Executive experience	International experience	banking/finance/audit/risk	operations a/o IT	corporate governance
Ralph Hamers (EB/MBB)	1966	M	Dutch	▪▪	▪▪	▪▪	▪	▪▪
Koos Timmermans (EB/MBB)	1960	M	Dutch	▪▪	▪	▪▪	▪	▪▪
Steven van Rijswijk (EB/MBB)	1970	M	Dutch	▪▪	▪	▪▪	▪	▪
Roland Boekhout (MBB)	1963	M	Dutch	▪▪	▪▪	▪▪	▪	▪▪
Aris Bogdaneris (MBB)	1963	M	Canadian	▪▪	▪▪	▪▪	▪▪	▪
Isabel Fernandez (MBB)	1968	F	Spanish	▪▪	▪▪	▪▪	▪	▪
Roel Louwhoff (MBB)	1965	M	Dutch	▪▪	▪▪	▪	▪▪	▪

Supervisory Board			Diversity	Competencies				
Name	Year of birth	Gender	Nationality	Executive experience	International experience	banking/finance/audit/risk	operations a/o IT	corporate governance
Mr Wijers (chair)	1951	M	Dutch	▪▪	▪▪	▪	▪▪	▪▪
Mr Lamberti (vice-chair)	1956	M	German	▪▪	▪	▪▪	▪▪	▪
Mr Balkenende	1956	M	Dutch	▪	▪▪	▪	▪	▪▪
Mr Boyer de la Giroday	1952	M	Belgian	▪▪	▪	▪▪	▪	▪▪
Mr Breukink	1950	M	Dutch	▪	▪▪	▪	▪	▪▪
Ms Gheorghe	1956	F	Romanian/British	▪▪	▪▪	▪▪	▪	▪▪
Ms Haase	1953	F	Austrian	▪▪	▪▪	▪▪	▪	▪▪
Mr Reibestein	1956	M	Dutch	▪	▪▪	▪▪	▪	▪

Information as at 31 December 2018

▪ limited/some to average experience in the area

▪▪ (had been) accountable and (had) executed over several years

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 the Management Board Banking. 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:

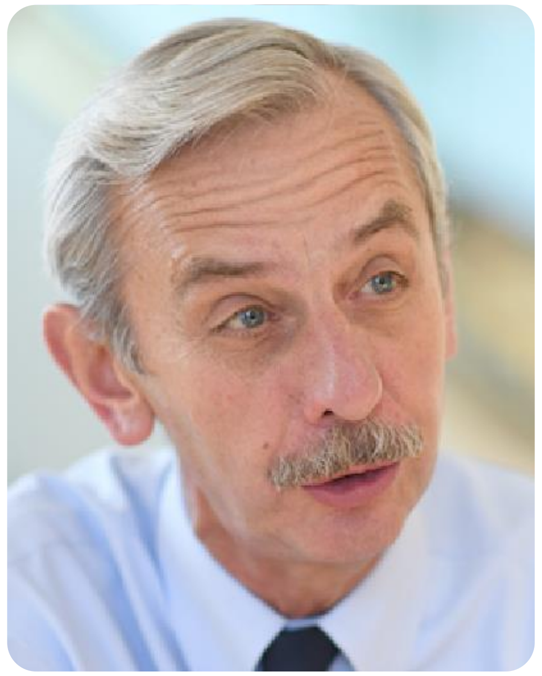
Hans Wijers

Chairman Supervisory Board

Hermann-Josef Lamberti

Vice-chairman Supervisory Board

Jan Peter Balkenende



Eric Boyer de la Giroday

Henk Breukink

Mariana Gheorghe

Margarete Haase

Robert Reibestein

Appreciation for the Management Board Banking and ING employees

The Supervisory Board would like to thank the members of the Management Board Banking for their hard work in 2018. Important milestones were the steps taken towards creating a globally scalable digital platform for customers and further digitalising our offering. 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 going through a challenging period 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, which is deemed to be incorporated by reference here.

Amsterdam, 4 March 2019
The Supervisory Board

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Consolidated Annual Accounts

Consolidated statement of financial position

as at 31 December

in EUR million	2018[1]	2017[1]
Assets		
Cash and balances with central banks 2	49,987	21,989
Loans and advances to banks 3	30,420	28,746
Financial assets at fair value through profit or loss 4		
– Trading assets	50,163	116,763
– Non-trading derivatives	2,672	2,185
– Designated as at fair value through profit or loss	2,887	4,242
– Mandatorily at fair value through profit or loss	64,783	n/a
Investments	n/a	79,073
Financial assets at fair value through other comprehensive income 5	31,223	n/a
Securities at amortised cost 6	47,276	n/a
Loans and advances to customers 7	592,328	574,899
Investments in associates and joint ventures 8	1,044	947
Property and equipment 9	1,659	1,801
Intangible assets 10	1,839	1,469
Current tax assets	201	324
Deferred tax assets 35	841	818
Other assets 11	8,426	13,062
Assets held for Sale 12	1,262	
Total assets	**887,012**	**846,318**

	2018[1]	2017[1]
Liabilities		
Deposits from banks 13	37,330	36,821
Customer deposits 14	580,294	552,690
Financial liabilities at fair value through profit or loss 15		
– Trading liabilities	31,215	73,596
– Non-trading derivatives	2,313	2,346
– Designated as at fair value through profit or loss	59,179	11,215
Current tax liabilities	856	774
Deferred tax liabilities 35	640	752
Provisions 16	1,011	1,713
Other liabilities 17	13,396	15,972
Debt securities in issue 18	102,159	90,231
Subordinated loans 19	13,643	15,831
Total liabilities	**842,036**	**801,941**
Equity 20		
Share capital and share premium	17,067	17,067
Other reserves	3,504	4,304
Retained earnings	23,602	22,291
Shareholders' equity (parent)	**44,173**	**43,662**
Non-controlling interests	803	715
Total equity	**44,976**	**44,377**
Total liabilities and equity	**887,012**	**846,318**

1 The amounts for the period ended 31 December 2018 have been prepared in accordance with IFRS 9, the adoption of IFRS 9 led to new presentation requirements; prior period amounts have not been restated. References relate to the accompanying notes. These are an integral part of the Consolidated annual accounts. Reference is made to Note 1 'Accounting policies' for information on Changes in accounting principles, estimates and presentation of the consolidated annual accounts and related notes.

Consolidated statement of profit or loss

for the years ended 31 December

in EUR million	2018[1]	2017[1]	2016[1]
Interest income using effective interest rate method	25,288	n/a	n/a
Other interest income	2,504	n/a	n/a
Total interest income	**27,792**	**43,988**	**44,221**
Interest expense using effective interest rate method	–11,222	n/a	n/a
Other interest expense	–2,620	n/a	n/a
Total interest expense	**–13,842**	**–30,206**	**–30,904**
Net interest income 21	**13,949**	**13,782**	**13,317**
Fee and commission income	4,240	3,864	3,581
Fee and commission expense	–1,437	–1,150	–1,148
Net fee and commission income 22	**2,803**	**2,714**	**2,433**
Valuation results and net trading income 23	1,031	672	1,093
Investment income 24	183	192	421
Share of result from associates and joint ventures 8	124	166	77
Result on disposal of group companies 25	–123	1	1
Other income 26	136	349	172
Total income	**18,102**	**17,876**	**17,514**

	2018[1]	2017[1]	2016[1]
Addition to loan loss provisions 7	656	676	974
Staff expenses 27	5,430	5,198	5,036
Other operating expenses 28	5,265	4,598	5,567
Total expenses	**11,351**	**10,472**	**11,577**
Result before tax	**6,751**	**7,404**	**5,937**
Taxation 35	2,036	2,303	1,635
Net result (before non-controlling interest)	**4,715**	**5,101**	**4,302**
Net result attributable to Non-controlling interests	108	82	75
Net result attributable to shareholder of the parent	**4,607**	**5,019**	**4,227**
Dividend per ordinary share (in euros)	5.41	6.83	2.89
Total amount of dividend paid (in million euros)	2,517	3,176	1,345

1 The amounts for the period ended 31 December 2018 have been prepared in accordance with IFRS 9, the adoption of IFRS 9 led to new presentation requirements; prior period amounts have not been restated.

References relate to the accompanying notes. These are an integral part of the Consolidated annual accounts.

Reference is made to Note 1 ‘Accounting policies’ for information in Changes in accounting principles, estimates and presentation of the Consolidated annual accounts and related notes.

Consolidated statement of comprehensive income

for the years ended 31 December

in EUR million	2018[1]	2017[1]	2016[1]
Net result (before non-controlling interests)	4,715	5,101	4,302
Other comprehensive income			
Items that will not be reclassified to the statement of profit or loss:			
Realised and unrealised revaluations property in own use	1	26	2
Remeasurement of the net defined benefit asset/liability 34	6	–29	–65
Net change in fair value of equity instruments at FVOCI	–461	n/a	n/a
Change in fair value of own credit risk of financial liabilities at FVPL	198	n/a	n/a
Items that may subsequently be reclassified to the statement of profit or loss:			
Unrealised revaluations AFS investments and other revaluations	n/a	–284	189
Realised gains/losses on AFS investments reclassified to the statement of profit or loss	n/a	–92	–272
Net change in fair value of debt instruments at FVOCI	–163	n/a	n/a
Realised gains/losses on debt instruments at FVOCI reclassified to the statement of profit or loss	–55	n/a	n/a
Changes in cash flow hedge reserve	382	–526	68
Exchange rate differences	–402	–861	–273
Share of other comprehensive income of associates and joint ventures and other income	13	3	5
Total comprehensive income	**4,234**	**3,338**	**3,956**
Comprehensive income attributable to:			
Non-controlling interests	132	109	
Shareholders of the parent	4,102	3,229	3,956
	4,234	**3,338**	**3,956**

1 The amounts for the period ended 31 December 2018 have been prepared in accordance with IFRS 9, the adoption of IFRS 9 led to new presentation requirements; prior period amounts have not been restated.

References relate to the accompanying notes. These are an integral part of the Consolidated annual accounts. This includes Note 1 'Accounting policies', which contains information on Changes in accounting principles, estimates and presentation of the Consolidated annual accounts and related notes.

Reference is made to Note 35 'Taxation' for the disclosure on the income tax effects on each component of the other comprehensive income.

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 2017	17,067	4,304	22,291	43,662	715	44,377
Effect of change in accounting policy [1]		–648	–391	–1,038	–14	–1,053
Balance as at 1 January 2018	17,067	3,656	21,901	42,624	700	43,325
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	–55
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 34		6		6		6
Exchange rate differences and other		–386		–386	–16	–402
Share of other comprehensive income of associates and joint ventures and other income		264	–251	13		13
Change in fair value of own credit risk of financial liabilities at fair value through profit or loss		198		198		198
Total amount recognised directly in other comprehensive income net of tax		**–312**	**–192**	**–505**	**24**	**–481**
Net result		160	4,447	4,607	108	4,715
Total comprehensive income net of tax		**–152**	**4,255**	**4,102**	**132**	**4,234**
Dividends			–2,517	–2,517	–61	–2,578
Employee stock option and share plans			59	59	0	59
Changes in the composition of the group and other changes [2]			–96	–96	31	–65
Balance as at 31 December 2018	**17,067**	**3,504**	**23,602**	**44,173**	**803**	**44,976**

1 Changes per type of Reserve components are presented in Note 1 ‘Accounting policies’, 1.3.1.1. IFRS 9 ‘Financial instruments’ – Impact of adoption.
2 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	17,067	5,835	20,638	43,540	606	44,146
Unrealised revaluations available-for sale investments and other revaluations		–294		–294	10	–284
Realised gains/losses transferred to the statement of profit or loss		–90		–90	–2	–92
Changes in cash flow hedge reserve		–515		–515	–11	–526
Realised and unrealised revaluations property in own use			26	26		26
Remeasurement of the net defined benefit asset/liability 34		–29		–29		–29
Exchange rate differences		–891		–891	30	–861
Share of other comprehensive income of associates and joint ventures and other income		135	–132	3		3
Total amount recognised directly in other comprehensive income		**–1,684**	**–106**	**–1,790**	**27**	**–1,763**
Net result from continuing and discontinued operations		153	4,866	5,019	82	5,101
Total comprehensive income		**–1,531**	**4,760**	**3,229**	**109**	**3,338**
Dividends			–3,176	–3,176		–3,176
Employee stock option and share plans			69	69		69
Balance as at 31 December 2017	**17,067**	**4,304**	**22,291**	**43,662**	**715**	**44,377**

References relate to the accompanying notes. These are an integral part of the Consolidated annual accounts.

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 2016	17,067	5,784	18,006	40,857	638	41,495
Unrealised revaluations available-for sale investments and other revaluations		208		208	–19	189
Realised gains/losses transferred to the statement of profit or loss		–272		–272		–272
Changes in cash flow hedge reserve		102		102	–34	68
Unrealised revaluations property in own use		2		2		2
Remeasurement of the net defined benefit asset/liability 34		–65		–65		–65
Exchange rate differences		–251		–251	–22	–273
Share of other comprehensive income of associates and joint ventures and other income		203	–198	5		5
Total amount recognised directly in other comprehensive income		**–73**	**–198**	**–271**	**–75**	**–346**
Net result from continuing and discontinued operations		124	4,103	4,227	75	4,302
Total comprehensive income		**51**	**3,905**	**3,956**	**–**	**3,956**
Dividends			–1,345	–1,345	–32	–1,377
Employee stock option and share plans			72	72		72
Balance as at 31 December 2016	**17,067**	**5,835**	**20,638**	**43,540**	**606**	**44,146**

Changes in individual reserve components are presented in Note 20 'Equity'.

Consolidated statement of cash flows

for the years ended 31 December

in EUR million		2018[1]	2017[1]	2016[1]
Cash flows from operating activities 29				
Result before tax		6,751	7,404	5,937
Adjusted for:	– Depreciation and amortisation	520	520	536
	– Addition to loan loss provisions	656	676	974
	– Other	–1,646	708	1,580
Taxation paid		–1,600	–1,753	–1,555
Changes in:	– Net change in Loans and advances to/from banks, not available/payable on demand	–212	3,014	–1,514
	– Net change in Trading assets and Trading liabilities	9,820	–11,180	11,342
	– Loans and advances to customers	–31,016	–21,397	–29,668
	– Customer deposits	31,241	22,960	23,682
	– Other	3,622	–2,337	–2,357
Net cash flow from/(used in) operating activities		**18,136**	**–1,385**	**8,957**
Cash flows from investing activities				
Investments and advances:				
	– Acquisition of subsidiaries, net of cash acquired	–111		
	– Associates and joint ventures	–97	–79	–49
	– Available-for-sale investments	n/a	–21,601	–27,003
	– Held-to-maturity investments	n/a	–3,609	–1,731
	– Financial assets at FVOCI	–10,517	n/a	n/a
	– Securities at amortised cost	–17,985	n/a	n/a
	– Property and equipment	–286	–304	–415
	– Other investments	–258	–264	–288

	2018[1]	2017[1]	2016[1]
Disposals and redemptions:			
– Associates and joint ventures	116	245	54
– Available-for-sale investments	n/a	32,788	31,165
– Held-to-maturity investments	n/a	2,675	630
– Financial assets at FVOCI	15,657	n/a	n/a
– Securities at amortised cost	18,709	n/a	n/a
– Property and equipment	17	79	75
– Loans sold	206	1,815	1,295
– Other investments		9	9
Net cash flow from/(used in) investing activities	**5,451**	**11,754**	**3,742**
Cash flows from financing activities			
Proceeds from debt securities	141,214	89,369	106,174
Repayments of debt securities	–131,170	–95,077	–121,998
Proceeds from issuance of subordinated loans	1,828	2,314	1,085
Repayments of subordinated loans	–4,594	–1,246	–961
Purchase/sale of treasury shares			
Dividends paid	–2,517	–3,176	–1,345
Net cash flow from/(used in) financing activities	**4,761**	**–7,816**	**–17,045**
Net cash flow	28,348	2,553	–4,346
Cash and cash equivalents at beginning of year	18,975	16,163	20,354
Effect of exchange rate changes on cash and cash equivalents	205	260	155
Cash and cash equivalents at end of year	**47,528**	**18,976**	**16,163**

1 The amounts for the period ended 31 December 2018 have been prepared in accordance with IFRS 9, the adoption of IFRS 9 led to new presentation requirements; prior period amounts have not been restated.

Consolidated statement of cash flows - continued

As at 31 December 2018, Cash and cash equivalents includes cash and balances with central banks of EUR 49,987 million (2017: EUR 21,989 million; 2016: EUR 18,144 million). The increase in cash and balances with central banks reflects ING's liquidity management. Reference is made to Note 31 'Cash and cash equivalents'.

References relate to the accompanying notes. These are an integral part of the Consolidated annual accounts.

The table below presents the Interest and dividend received and paid.

in EUR million	2018[1]	2017	2016
Interest received	28,751	45,039	44,879
Interest paid	–14,937	–30,978	–31,621
	13,814	**14,061**	**13,258**
Dividend received[2]	180	208	208
Dividend paid	–2,517	–3,176	–1,345

1 The amounts for the period ended 31 December 2018 have been prepared in accordance with IFRS 9, the adoption of IFRS 9 led to new presentation requirements; prior 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, 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 statement of cash flow.

Notes to the Consolidated annual accounts

amounts in millions of euros, unless stated otherwise

Notes to the accounting policies

Reporting entity

ING Bank N.V. is a company domiciled in Amsterdam, the Netherlands. Commercial Register of Amsterdam, number 33031431. These Consolidated annual accounts, as at and for the year ended 31 December 2018, comprise ING Bank N.V. (the Parent company) and its subsidiaries, together referred to as ING Bank. ING Bank 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.

Authorisation of the Consolidated annual accounts

The ING Bank Consolidated annual accounts, as at and for the year ended 31 December 2018, were authorised for issue in accordance with a resolution of the Management Board Banking on 4 March 2019. The Management Board Banking may decide to amend the annual accounts as long as these are not adopted by the General Meeting of Shareholders. The General Meeting of Shareholders may decide not to adopt the annual accounts, but may not amend these.

Basis of preparation of the Consolidated annual accounts

The ING Bank Consolidated annual accounts 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 Bank applies fair value hedge accounting to portfolio hedges of interest rate risk (macro hedging). For further information, reference is made to Note 1 'Accounting policies', d) Principles of valuation and determination of results and Note 37 'Derivatives and hedge accounting'.

The ING Bank Consolidated annual accounts have been prepared on a going concern basis.

Amounts may not add up due to rounding

1 Accounting policies

ING Bank has consistently applied its accounting policies to all periods presented in these Consolidated annual accounts, except for changes in IFRS 9 that became effective in 2018.

1.1 Changes in IFRS effective in 2018

A number of new or amended standards became applicable for the current reporting period. ING Bank changed its accounting policies as a result of adopting IFRS 9 'Financial Instruments'.

The impact of the adoption of IFRS 9 is disclosed in note 1.3.1.1 'IFRS 9 Financial instruments – Impact of adoption' and the new IFRS 9 accounting policies are disclosed in note 1.3.1.2 'IFRS 9 Financial instruments - Accounting policies applied from 1 January 2018'. The other standards and amendments, including IFRS 15 (refer to note 1.3.2 'IFRS 15 Revenue from Contract with Customers'), did not have a significant impact on the Bank's accounting policies.

Except for the amendment to IFRS 9 regarding prepayment features with negative compensation, ING Bank has not early adopted any standard, interpretation or amendment which has been issued, but is not yet effective.

1.2 Upcoming changes in IFRS after 2018

Major new IFRSs

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. The new requirements are effective for annual periods beginning on or after 1 January 2019 and will be applied by ING as of that date.

For lessee accounting, the new standard removes the distinction between operating or finance leases. All leases will be 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). A lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. The standard permits a lessee to choose either a full retrospective or a modified retrospective transition approach. Furthermore the standard provides some practical expedients and exemptions. ING has opted to apply for periods starting from January 1, 2019 the modified retrospective approach and will make use of several of these practical expedients and exemptions permitted under the standard. Lessor accounting remains substantially unchanged.

The IFRS 16 implementation project commenced in 2017 with a data gathering exercise in a preliminary impact assessment.

The implementation project's main focus was on:
Performing two 'parallel runs' over the course of 2018, to test readiness of systems, processes and a number of controls for transition to IFRS 16 as per 1 January 2019;

- Technical interpretation of the Standard;
- Developing and validating the lease calculation models;
- Updating the policies and governance impacted by IFRS 16;
- Preparing the IFRS 16 transition disclosures.

As per 31 December 2018 ING has a number of lease contracts for buildings, cars and other leases such as IT equipment that are currently accounted for under IAS 17 as operating leases. As a result of the new IFRS 16 requirements, ING estimates that the Right-of-use assets and Lease liabilities to be recognised will amount to approximately EUR 1.3 billion. This amount is marginally lower than the future rental commitments to be paid under non-cancellable operating leases, as disclosed in Note 43 Contingent liabilities and commitments. This decrease is largely caused by the effects of the exemptions applied for leases of low-value assets, the exemption for short-term leases, the effect of discounting and the exclusion of the non-lease components in the lease payments. This is partly offset by including lease payments for periods covered by extension options that are reasonably certain to be exercised.

ING Bank has opted to use the incremental borrowing rate as the discount rate for initial measurement of the lease liability. The incremental borrowing rate is the rate a lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. This rate is approximated by using the risk free rate applicable to the lease term, 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 business and treasury departments. It is determined by either ING Bank or Local Asset and Liability Committee (ALCO).

There is no significant impact of the adoption of IFRS 16 on ING Bank's Net result, Comprehensive income or Shareholders' equity on transition. This follows ING'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.

Changes to IFRS effective in 2019 and onwards expected to have no significant impact on ING Bank

The following published amendments are not mandatory for 2018 and have not been early adopted by ING Bank. ING Bank 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 Bank's Consolidated annual accounts.

The list of upcoming changes to IFRS, which are applicable for ING Bank:
Effective in 2019 (* - endorsed by the EU, the rest not yet endorsed by the EU):

- IFRIC 23 'Uncertainty over Income Tax Treatments' (issued on 7 June 2017)*;
- Amendments to IAS 28 'Investments in Associates and Joint Ventures': Long-term Interests in Associates and Joint Ventures (issued on 12 October 2017)*;
- Annual improvements cycle 2015 – 2017: Amendments to IFRS 3 'Business Combinations', IFRS 11 'Joint Arrangements', IAS 12 'Income Taxes', IAS 23 'Borrowing Costs' (issued on 12 December 2017); and
- Amendments to IAS 19 'Employee Benefits': Plan Amendment, Curtailment or Settlement (issued on 7 February 2018).

Effective in 2020 (not yet endorsed by the EU):
Amendments to References to the Conceptual Framework in IFRS Standards (issued on 29 March 2018);
Amendment to IFRS 3 Business Combinations (issued on 22 October 2018); and
Amendments to IAS 1 and IAS 8: Definition of Material (issued on 31 October 2018).

IASB has also issued IFRS 17 'Insurance Contracts' effective in 2021, however it is not applicable for ING Bank.

1.3 Changes to accounting policies in 2018

1.3.1 IFRS 9 'Financial instruments'

ING Bank has applied the classification, measurement, and impairment requirements of IFRS 9 retrospectively as of 1 January 2018 by adjusting the opening balance sheet and opening equity at 1 January 2018. ING Bank has not restated comparative periods as permitted by the standard. ING Bank early adopted the amendment to IFRS 9, otherwise effective 1 January 2019, which allows financial assets with prepayment features that permit or require a party to a contract either to pay or receive reasonable compensation for the early termination of the contract, to be measured at amortised cost (AC) or at fair value through other comprehensive income (FVOCI). ING Bank opted to continue applying the hedge accounting rules of IAS 39 under the EU-carve out as explicitly permitted by IFRS 9. Notwithstanding, the revised hedge accounting disclosures as required by IFRS 7 'Financial Instruments: Disclosures' as per 1 January 2018 have been implemented.

1.3.1.1 IFRS 9 'Financial instruments' – Impact of adoption

Transition

Changes in accounting policies resulting from the adoption of IFRS 9 have been applied retrospectively. Comparative periods have not been restated. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of IFRS 9 are recognised in retained earnings and reserves as at 1 January 2018. Accordingly, the information presented for 2017 does not reflect the requirements of IFRS 9 and therefore is not comparable to the information presented for 2018 under IFRS 9.

The following assessments have been made on the basis of the facts and circumstances that existed at the date of initial application:

- The determination of the business model within which a financial asset is held;
- The designation and revocation of previous designations of certain financial assets and financial liabilities as measured at Fair Value Through Profit or Loss (FVPL);
- The designation of certain investments in equity instruments not held-for-trading as at Fair Value Through Other Comprehensive Income (FVOCI); and

- For financial liabilities designated as at FVPL, the determination of whether presenting the effects of changes in the financial liability's credit risk in Other Comprehensive Income (OCI) would create or enlarge an accounting mismatch in profit or loss.

In 2018 ING Bank continued to test and refine the new processes, internal controls and governance framework necessitated by the adoption of IFRS 9. This has given rise to a minor change in estimation of the IFRS 9 impact, compared to what was presented in the ING Bank Annual Report 2017.

The following table reconciles the carrying amounts of financial instruments under IAS 39 to the carrying amounts under IFRS 9 on transition to IFRS 9 on 1 January 2018.

Reconciliation of carrying amounts on the date of initial application of IFRS 9

In EUR million	Ref	IAS 39	Reclassfication[1]	Remeasurement	IFRS 9
Cash and balances with central banks		21,989	3		21,992
Loans and advances to banks		28,746	-59	2	28,689
Trading assets	E	116,763	-51,264		65,499
Non-trading derivatives		2,185	577		2,762
Loans and advances at FVPL	C, E	2,500	54,082	31	56,613
Debt securities at FVPL	C	1,738	1,497	-96	3,139
Equity securities at FVPL	D	4	184	16	204
Available-for-sale	A, C, D	69,730	-69,730		
Debt securities at FVOCI	A		30,459	-22	30,437
Equity securities at FVOCI	D		3,800		3,800
Loans and advances at FVOCI	B		3,139	225	3,364
Securities at AC	A, C	9,343	39,904	-830	48,417
Loans and advances to customers	B, C	574,899	-8,367	-761	565,771
Other assets (financial and non-financial)		18,421	-4,225	306	14,502
Total assets		**846,318**	**–**	**-1,131**	**845,188**
Deposits from banks		36,821	108		36,929
Customer deposits		552,690	156		552,846
Trading liabilities	E	73,596	-35,362		38,234
Non-trading derivatives		2,346	326		2,672
Financial liabilities designated at FVPL	E	11,215	37,264		48,479
Other liabilities (financial and non-financial)		19,211	-3,366	-77	15,768
Debt securities in issue		90,231	703		90,934
Subordinated loans		15,831	170		16,001
Total liabilities		**801,941**	**–**	**-77**	**801,863**
Shareholders' equity (parent)		43,662		-1,038	42,624
Non-controlling interest		715		-14	700
Total equity		**44,377**	**–**	**-1,053**	**43,325**
Total liabilities and equity		**846,318**	**–**	**-1,131**	**845,188**

1 Includes the reclassification of accrued interest from other assets and other liabilities to the corresponding balance sheet item of the host contract.

ING Bank's accounting policies on the classification of financial instruments under IFRS 9 are set out in note 1.3.1.2 'IFRS 9 Financial instruments - Accounting policies applied from 1 January 2018'. As a result of the combined application of the business model analysis and the Solely Payments of Principal and Interest (SPPI) test, the classification and measurement of the following portfolios has changed:

A. The Available-For-Sale (AFS) investment portfolio was split into a portfolio classified at Amortised Cost (AC) and a portfolio at FVOCI; the reclassification from AFS to AC resulted in a reduction of the unrealised revaluation gains in equity at transition date.
B. For a specific mortgage portfolio, the measurement changed from AC to FVOCI as it meets the Hold to Collect and Sell (HtC&S) business model requirements. As the fair value of the portfolio is higher than the AC, this had a positive impact on equity; and
C. Certain debt securities and loans previously booked at AC or AFS are measured at Fair Value through Profit or Loss (FVPL) as the cash flows do not meet the SPPI test. This measurement change has a limited negative impact on equity at transition date.

Furthermore, there are certain portfolios for which only the classification on ING's Consolidated statement of financial position has changed, without impacting equity:

D. For strategic equity instruments, ING elected to apply the option to irrevocably designate these at FVOCI, instead of the IFRS 9 default measurement of FVPL. FVOCI equity investments will no longer recycle revaluation reserves to the Statement Of Profit Or Loss (SOPL) upon disposal. For these instruments only dividend income continues to be recognised in the SOPL; and
E. Certain reverse repurchase portfolios are classified as financial assets 'Mandatorily at FVPL' instead of Held-for-trading. ING has used the fair value option for the related repurchase financial liabilities.

Other Assets and Other Liabilities include the impact of reclassification of accrued interest from other assets and other liabilities to the corresponding balance sheet item of the host contract (reclassification). The remeasurement impact of EUR 377 million (other assets EUR 300 million and other liabilities EUR -77 million) includes the remeasurement impact on deferred and current tax assets and liabilities (EUR 344 million respectively EUR 72 million), the remeasurement of Associates (EUR -28 million) and the provision on off-balance positions (EUR -11 million).

The following table shows the effects of the reclassification and remeasurement of financial assets from IAS 39 categories into AC under IFRS 9.

Reconciliation and remeasurement of financial assets to AC

Financial assets at AC - in EUR million	IAS 39	Reclassfication[1]	Remeasurement	IFRS 9
Cash and balances with central banks				
Carrying amount 31 December 2017	21,989			21,989
- From Other assets		3		3
Carrying amount 1 January 2018	**21,989**	**3**		**21,992**
Loans and advances from banks				
Carrying amount 31 December 2017	28,746			28,746
- To Securities at AC		-201		-201
- From Other assets		142		142
- Recognition of expected credit losses			2	2
Carrying amount 1 January 2018	**28,746**	**-59**	**2**	**28,689**
Securities at amortised cost				
Carrying amount 31 December 2017	9,343			9,343
- From Loans and advances to banks		201		201
- From Loans and advances to customers		5,099		5,099
- From Available-for-sale		34,980	-825	34,155
- To Financial assets at FVPL		-753		-753
- From Other assets		377		377
- Recognition of expected credit losses			-5	-5
Carrying amount 1 January 2018	**9,343**	**39,904**	**-830**	**48,417**
Loans and advances to customers				
Carrying amount 31 December 2017	574,899			574,899
- To Securities at amortised cost		-5,099		-5,099
- To Financial assets at FVOCI		-3,125		-3,125
- To Financial assets at FVPL		-1,348		-1,348
- From Other assets		1,205		1,205
- Recognition of expected credit losses			-761	-761
Carrying amount 1 January 2018	**574,899**	**-8,367**	**-761**	**565,771**
Other financial assets				
Carrying amount 31 December 2017	18,421			18,421
- To Loans and advances from banks		-146		-146
- To Financial assets at FVPL		-2,056		-2,056
- To Financial assets at FVOCI		-439		-439
- To Securities at amortised cost		-377		-377
- To Loans and advances to customers		-1,205		-1,205
- Other financial assets		-2	306	304
Carrying amount 1 January 2018	**18,421**	**-4,225**	**306**	**14,502**
Total financial assets at amortised cost	**653,398**	**27,256**	**-1,283**	**679,371**

1 Includes the reclassification of accrued interest from other assets to the corresponding balance sheet item of the host contract

The following table shows the effects of the reclassification and remeasurement of financial assets from IAS 39 categories into FVPL under IFRS 9.

Reconciliation and remeasurement of financial assets to FVPL

Financial assets at FVPL - in EUR million	IAS 39	Reclassfication[1]	Remeasurement	IFRS 9
Trading assets				
Carrying amount 31 December 2017	116,763			116,763
- From Other Assets		1,466		1,466
- To Loans and advances at FVPL		-52,730		-52,730
Carrying amount 1 January 2018	**116,763**	**-51,264**		**65,499**
Non-trading derivatives				
- Opening balance	2,185			2,185
- From Other Assets		577		577
Carrying amount 1 January 2018	**2,185**	**577**		**2,762**
Loans and advances at FVPL				
Carrying amount 31 December 2017	2,500			2,500
- From Trading assets		52,730		52,730
- From Loans and advances to customers		1,348	31	1,379
- From Other Assets		4		4
Carrying amount 1 January 2018	**2,500**	**54,082**	**31**	**56,613**
Debt securities at FVPL				
Carrying amount 31 December 2017	1,738			1,738
- From Available-for-sale		735		735
- From Amortised cost		753	-96	657
- From Other Assets		9		9
Carrying amount 1 January 2018	**1,738**	**1,497**	**-96**	**3,139**
Equity securities at FVPL				
Carrying amount 31 December 2017	4			4
- From Available-for-sale		184	16	200
Carrying amount 1 January 2018	4	184	16	204
Total financial assets FVPL	**123,190**	**5,076**	**-49**	**128,217**

1 Includes the reclassification of accrued interest from other assets liabilities to the corresponding balance sheet item of the host contract.

The following table shows the effects of the reclassification and remeasurement of financial assets from IAS 39 categories into FVOCI under IFRS 9.

Reconciliation and remeasurement of financial assets to FVOCI

Financial assets at FVOCI - in EUR million	IAS 39	Reclassfication[1]	Remeasurement	IFRS 9
Available-for-sale				
Carrying amount 31 December 2017	69,730			69,730
- To Equity securities at FVOCI		-3,800		-3,800
- To Debt securities at FVOCI		-30,033		-30,033
- To Equity securities at FVPL		-183		-183
- To Debt securities at FVPL		-735		-735
- To Securities at amortised cost		-34,979		-34,979
Carrying amount 1 January 2018	**69,730**	**-69,730**		
Debt securities at FVOCI				
Carrying amount 31 December 2017				
- From Available-for-sale		30,033	-2	30,031
- From Other Assets		426		426
- Recognition of expected credit losses			-20	-20
Carrying amount 1 January 2018		**30,459**	**-22**	**30,437**
Equity securities at FVOCI				
Carrying amount 31 December 2017				
- From Available-for-sale		3,800		3,800
Carrying amount 1 January 2018		**3,800**		**3,800**
Loans and advances at FVOCI				
Carrying amount 31 December 2017				
- From Loans and advances to customers		3,125	225	3,350
- From Other Assets		14		14
Carrying amount 1 January 2018		**3,139**	**225**	**3,364**
Total financial assets at FVOCI	**69,730**	**-32,332**	**203**	**37,601**

1 Includes the reclassification of accrued interest from other assets to the corresponding balance sheet item of the host contract

The following table shows the effects of the reclassification and remeasurement of financial liabilities from IAS 39 categories into AC under IFRS 9.

Reconciliation and remeasurement of financial liabilities to AC

Financial liabilities at AC - in EUR million	IAS 39	Reclassfication[1]	Remeasurement	IFRS 9
Deposits from banks	36,821	108		36,929
Customer deposits	552,690	156		552,846
Other liabilities	19,211	-3,366	-77	15,768
Debt securities in issue	90,231	703		90,934
Subordinated loans	15,831	170		16,001
Total financial liabilities at amortised cost	**714,784**	**-2,229**	**-77**	**712,478**

1 Includes the reclassification of accrued interest from other liabilities to the corresponding balance sheet item of the host contract

The following table shows the effects of the reclassification and remeasurement of financial liabilities from IAS 39 categories into FVPL under IFRS 9.

Reconciliation and remeasurement of financial liabilities to FVPL

Financial liabilities at FVPL - in EUR million	IAS 39	Reclassfication[1]	Remeasurement	IFRS 9
Trading liabilities				
Carrying amount 31 December 2017	73,596			73,596
- To Financial liabilities designated at FVPL		-37,161		-37,161
- From Other liabilities		1,799		1,799
Carrying amount 1 January 2018	73,596	-35,362		38,234
Non-trading derivatives				
Carrying amount 31 December 2017	2,346			2,346
- From Other liabilities		326		326
Carrying amount 1 January 2018	2,346	326		2,672
Financial liabilities designated at FVPL				
Carrying amount 31 December 2017	11,215			11,215
- From Trading liabilities		37,161		37,161
- From Other liabilities		103		103
Carrying amount 1 January 2018	11,215	37,264		48,479
Total financial liabilities at FVPL	**87,157**	**2,228**		**89,385**

1 Includes the reclassification of accrued interest from other liabilities to the corresponding balance sheet item of the host contract

Classification and Measurement

Classification and measurement of financial assets and financial liabilities on the date of initial application of IFRS 9 as at 1 January 2018

- in EUR million 2017 classification	Note	Orignal measurement under IAS 39	Orignal carrying amount under IAS 39	New carrying amount under IFRS 9[1]	New measurement under IFRS 9	2018 classification
Cash and balances with central banks		Amortised cost	21,989	21,992	Amortised cost	Cash and balances with central banks
Loans and advances to banks	2	Amortised cost	28,746	28,689	Amortised cost	Loans and advances to banks
Financial assets at FVPL	4					Financial assets at FVPL
- trading assets		FVPL	116,763	65,499	FVPL (mandatorily)	trading assets
- non-trading derivatives		FVPL	2,185	2,762	FVPL (mandatorily)	non-trading derivatives
- other financial assets at FVPL		FVPL	4,242	2,162	FVPL (designated)	other financial assets at FVPL
				57,795	FVPL (mandatorily)	other financial assets at FVPL
Investments2 - equity securities (AFS)		FVOCI	3,983	n/a		
- debt securities (AFS)		FVOCI	65,747	n/a		
- debt securities (HTM)		Amortised cost	9,343	n/a		
	5					Financial assets at FVOCI
			n/a	30,437	FVOCI	debt securities
			n/a	3,800	FVOCI (designated)	equity securities
			n/a	3,364	FVOCI	loans and advances
	6		n/a	48,417	Amortised cost	Securities at amortised cost
Loans and advances to customers	7	Amortised cost	574,899	565,771	Amortised cost	Loans and advances to customers
Other assets	11	Amortised cost	18,421	14,502	Amortised cost	Other assets
Total assets			**846,318**	**845,188**		**Total assets**
Deposits from banks	13	Amortised cost	36,821	36,929	Amortised cost	Deposits from banks
Customer deposits	14	Amortised cost	552,690	552,846	Amortised cost	Customer deposits
Financial liabilities at FVPL	15		0	0		Financial liabilities at FVPL
- trading liabilities		FVPL	73,596	38,234	FVPL	trading liabilities
- non-trading derivatives		FVPL	2,346	2,672	FVPL	non-trading derivatives
- other financial liabilities at FVPL		FVPL	11,215	48,479	FVPL (designated)	other financial liabilities at FVPL
Other liabilities	17	Amortised cost	19,211	15,768	Amortised cost	Other liabilities
Debt securities in issue	18	Amortised cost	90,231	90,934	Amortised cost	Debt securities in issue
Subordinated loans	19	Amortised cost	15,831	16,001	Amortised cost	Subordinated loans
Total liabilities			**801,941**	**801,863**		**Total liabilities**

1 Includes the reclassification of accrued interest from other assets and other liabilities to the corresponding balance sheet item of the host contract.
2 Investments represented all securities other than those measured at FVPL under IAS 39. Under IFRS 9 these Investments are classified as Financial Assets at FVOCI or Securities at amortised cost.

Impairment

IFRS 9 introduced requirements for the assessment of credit impairments, aimed at more timely recognition of credit losses. Consequently, a Loan Loss Provision (LLP) is recognised based on an "expected credit loss" model, whereas IAS 39 recognised a LLP based on an "incurred credit loss" model. As a result, on transition, the LLP increased by EUR 795 million.

The following table reconciles:

- the closing LLP for financial assets in accordance with IAS 39 and provisions for loan commitments and financial guarantee contracts in accordance with IAS 37 'Provisions, Contingent Liabilities and Contingent Assets' as at 31 December 2017; to
- the opening expected credit loss (ECL) LLP in accordance with IFRS 9 as at 1 January 2018.

Reconciliation of impairment allowance

Allowance on - in EUR million;	IAS 39	Reclassfication	Remeasurement	IFRS 9
Loans and advances to banks	8		-2	6
AFS/HTM debt investment securities and under IAS 39 reclassified to AC under IFRS 9			5	5
Loans and advances to customers	4,515	-8	761	5,269
AFS debt securities under IAS 39/financial assets at FVOCI under IFRS 9			20	20
Loans and advances to customers under IAS 39/ Loans and advances to customers at FVOCI under IFRS 9		8		8
Loan commitments and financial guarantee contracts issued[1]	105		11	116
Total	**4,628**	**0**	**795**	**5,423**

1 Includes the IAS 37 provisions on loan commitments and financial guarantees issued.

The breakdown of ECL between different stages of ING Bank's portfolio is further detailed in the table below. The increase in the LLP on transition to IFRS 9 is mainly the result of Stage 2 assets for which a life-time ECL was calculated.

IFRS 9 transition impact impairments as at 1 January 2018[1]

- in EUR million	IAS 39 LLP	IFRS 9 impairment stages	IFRS 9 ECL increase	IFRS9 ECL
Incurred but Not Reported (IBNR)	726	Stage 1-12 month ECL	81	438
		Stage 2 – Lifetime ECL	586	955
Individually assessed provisions	3,902	Stage 3 – Lifetime ECL	128	4,030
Total	**4,628**	**Total**	**795**	**5,423**

1 Includes provisions for the credit risk on contingent liabilities.

The table below shows carrying amounts and LLP of loans and advances to customers per stage.

Expected Credit Losses loans and advances to customers per stage as at 1 January 2018

- in EUR million	Carrying amount	ECL
Stage 1; 12-month ECL	515,284	402
Stage 2: Lifetime ECL not credit impaired	43,836	952
Stage 3: Lifetime ECL credit impaired	11,920	3,915
Total	**571,040**	**5,269**

Total net impact of transition to IFRS 9 on opening balance equity

The following table analyses the impact, net of tax, of transition to IFRS 9 on reserves and retained earnings. The impact relates to the liability credit reserve, the fair value reserve, retained earnings and share of associates, joint ventures and other reserve. There is no impact on other components of equity.

Impact (net of tax) of transition to IFRS 9 on reserves and retained earnings

- in EUR million	Impact of adopting IFRS 9 at 1 January 2018
Liability credit reserve	
Closing balance under IAS 39 (31 December 2017)	0
Reclassification of own credit risk for financial liabilities designated as at FVPL[1]	-190
Opening balance under IFRS 9 (1 January 2018)	**-190**
Fair value reserve	
Closing balance under IAS 39 (31 December 2017)	3,650
Reclassification of investment securities (debt) from Available-for-sale to amortised cost	-568
Reclassification of investment securities (equity) from Available-for-sale to FVPL	-42
Reclassification of loans and advances to debt instruments at FVOCI	175
Opening balance under IFRS 9 (1 January 2018)	**3,215**
Share of associates, joint venture and other reserve	
Closing balance under IAS 39 (31 December 2017)	2,473
Impact of application of IFRS 9	-23
Opening balance under IFRS 9 (1 January 2018)	**2,450**
Retained earnings	
Closing balance under IAS 39 (31 December 2017)	22,291
Reclassifications under IFRS 9[1]	182
Recognition of ECL under IFRS 9 (including lease receivables, loan commitments and financial guarantee contracts)	-572
Opening balance under IFRS 9 (1 January 2018)	**21,901**

1 Net amount of reclassifications to retained earnings, to and from fair value reserves and to liability credit reserves, due to changes in classification and measurement.

IFRS 9 Impact on Shareholders' equity and (fully-loaded) CET1

Impact (net of tax) of adopting IFRS 9 on 1 January 2018

	Impact on shareholders' equity (in € bln)	Impact on FL CET1 ratio (in %-point)
Loan loss provisions	-0.6	
Investment portfolio	-0.6	
Mortgages held in HTC&S portfolio	0.2	
Total impact	**–1.0**	**-0.2**

Presentation

IFRS 9 resulted in changes to IAS 1 for the presentation of Interest income for instruments calculated using the effective interest rate (EIR) method. The revised presentation requires it be shown as a separate line item in the consolidated statement of profit or loss. To enhance the relevance of the interest disclosures, ING Bank changed its separate presentation of interest (i.e. 'split interest') 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'. Similar presentation was applied to interest expense. The presentation of accrued interest in the balance sheet was also changed so that it is no longer separately presented, but rather included in the corresponding balance sheet item of the host contract. The new interest presentation was applied prospectively together with the other requirements of IFRS 9.

1.3.1.2 IFRS 9 'Financial instruments' - Accounting policies applied from 1 January 2018

Fair value and hedge accounting policies are included in the below section although these have remained unchanged with the adoption of IFRS 9.

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 instruments. Equity investments, debt securities financial assets and financial assets measured at fair value through profit or loss that require delivery within the time frame established by regulation or market convention ('regular way' purchases and sales) are recognised using trade date accounting. Trade date is the date on which ING commits to purchase or sell the asset. Loans and advances and repurchase agreements are recognised using settlement date accounting.

Derecognition of financial assets

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or where ING Bank has transferred substantially all risks and rewards of ownership. If ING Bank 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 from the Consolidated statement of financial position 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 statement of profit or loss.

Classification and measurement of financial instruments (IFRS 9)

Financial assets

From 1 January 2018, ING Bank 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 Bank 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 FVPL are expensed in the statement of profit or loss.

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 Bank'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, 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 Bank 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 Bank'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 Bank 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 Bank classifies its debt instruments:

- *Amortised Cost:*
  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 recognised 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. Fair value movements on trading loans and deposits (mainly repo's) are presented fully within valuation result and net trading income. ING Bank 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. 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. 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.

ING Bank reclassifies debt investments when, and only when, its business model for managing those assets changes.

Equity instruments

All equity investments are measured at fair value. ING Bank applies the fair value through OCI option to investments which are considered strategic, consisting of investments that add value to ING Bank'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 Bank'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 as applicable.

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 is presented in OCI. Upon derecognition this Debt 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.

A financial guarantee contract is a contract that requires ING Bank 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.

Fair values of financial assets and liabilities

All financial assets and liabilities are recognised initially at fair value. Subsequently, only financial assets and liabilities classified as held-for-trading or designated at FVPL and financial assets classified as FVOCI are measured at fair value in the annual accounts.

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 measured at fair value 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.

Critical judgements and key estimation uncertainties:
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 36 'Fair value of assets and liabilities' and Market risk in Note 50 'Risk management' for the basis of the determination of the fair value of financial instruments and related sensitivities.

Credit risk management classification and maximum credit risk exposure
Credit risk management disclosures are provided in Note 50 'Risk management – Credit risk' paragraph 'Credit risk categories'.

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 43 '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 Bank manages credit risk and determines credit risk exposures for that purpose is explained in Note 50 'Risk management – Credit risk' paragraph 'Credit Risk Appetite and Concentration Risk Framework'.

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 for 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 Bank 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 Bank documents the relationship between hedging instruments and hedged items, its risk management objective, together with the methods selected to assess hedge effectiveness. The Bank 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 Bank 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 relating to hedging core deposits and under-hedging strategies. Under the EU carve-out, hedge accounting may be applied to core deposits and ineffectiveness only arises when the revised estimate of the amount of cash flows in scheduled time buckets falls below the designated amount of that bucket.

ING Bank also 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).

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 equity. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit or loss. Amounts accumulated in equity 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 equity at that time remains in equity 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 equity 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 equity 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 equity are included in the statement of profit or loss when the foreign operation is disposed.

Non-trading derivatives that do not qualify for hedge accounting

Derivative instruments that are used by the Bank as part of its risk management strategies, but which do not qualify for hedge accounting under ING Bank'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.

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 Bank 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. Offsetting is also applied to certain clients subject to cash pooling arrangements where the intention to settle net is demonstrated via a physical transfer of cash balances into a single netting account on a period end basis.

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.

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 Bank 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 Bank'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 Bank 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 Bank 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 Bank 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 Bank applies data predominantly from a leading service provider enriched with the internal ING Bank 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 Bank 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 Bank 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 Bank'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 Bank 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.

Purchase 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 note 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 Bank 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 waivers);
- 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.

Critical judgements and key estimation uncertainties:
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 Bank 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 Bank'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.
Some of these judgements involve estimation. Given they are subjective and complex in nature, and because the LLP and the underlying exposures subject to impairment assessment are material,

these judgements are considered key sources of estimation uncertainty. The sensitivity of these estimates is assessed in the credit risk section of Note 50, Risk Management.

The critical judgements 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 Bank 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 Note 50, 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 Bank for collective assessment ECL calculations. The sensitivity analysis in Note 50 discloses these weights used.

The criteria for identifying a significant increase in credit risk. When determining whether the credit risk on a financial asset has increased significantly, ING Bank 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 assumptions made both in assigning financial asset PDs and in setting PD banding thresholds constitute a key source of estimation uncertainty. Analysis of the sensitivity associated with the assessment of significant increase in credit risk is presented in Note 50, Risk Management.

The definition of default. Whilst not a source of estimation uncertainty, 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.

1.3.1.3 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. Comparative periods were not restated for the adoption of IFRS 9.

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 Bank 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 Bank 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 Bank 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 Bank 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 Bank's credit risk systems.

Losses expected as a result of future events, no matter how likely, are not recognised.

ING Bank 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 Bank 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 Bank 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.

1.3.2 IFRS 15 'Revenue from Contract with Customers'

IFRS 15 is effective for annual periods beginning on or after 1 January 2018 and has been endorsed by the EU. IFRS 15 introduces a five-step approach for recognising revenue as and when the agreed performance obligations are satisfied. Agreed performance obligations are individual promises made to the customer that deliver benefit from the customer's perspective. Revenue should either be recognised at a point-in-time or over-time depending on the service being delivered to the customer. The adoption of IFRS 15 had no significant impact on ING Bank's results or financial position.

Reference is made to Note 22 'Net fee and commission income' which includes disaggregated revenue categories based on the type of services provided. Note 32 'Segments' includes Net fee and commission income, as reported to the Executive Board of ING Bank and the Management Board of ING Bank, disaggregated by line of business and by geographical segment.

1.4 Significant judgements and critical accounting estimates and assumptions

The preparation of the consolidated annual accounts 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 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 Bank 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 sections 1.3.1.2 'IFRS 9 Financial instruments - Accounting policies applied from 1 January 2018', 1.5 'Principles of valuation and determination of results' and the applicable notes to the Consolidated annual accounts.

1.5 Principles of valuation and determination of results

Consolidation

ING Bank (the Bank) comprises ING Bank N.V. (the Parent Company) and all other subsidiaries.

Subsidiaries are entities controlled by ING Bank N.V. Control exists if ING Bank 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 Bank controls another entity.

For interests in structured entities, the existence of control requires judgment as these entities are designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. This judgment 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 46 '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 Bank has agreed to sell but is still legally owned by ING Bank may still be controlled by Bank 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 Bank N.V.

ING Bank 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 Bank 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.

Segment reporting

An operating segment is a distinguishable component of the Bank, engaged in providing products or services, whose operating results are regularly reviewed by the Executive Board of ING Bank 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 Bank 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 Bank'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.

Foreign currency translation

Functional and presentation currency

Items included in the annual accounts of each of the Bank's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The Consolidated annual accounts are presented in euros, which is Bank'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 Bank 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.

Investments in associates and joint ventures

Associates are all entities over which the Bank 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 Bank 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 Bank's investment in associates and joint ventures (net of any accumulated impairment loss) includes goodwill identified on acquisition. The Bank'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 Bank'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 Bank 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 Bank and its associates and joint ventures are eliminated to the extent of the Bank'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 Bank. The reporting dates of all significant associates and joint ventures are consistent with the reporting date of the Bank.

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 Bank 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.

Leases

The determination of whether an arrangement is or contains a lease is based on the substance of the arrangement at inception date.

ING Bank as the lessee

The leases entered into by ING Bank are primarily operating leases. The total payments made under operating leases are recognised in the statement of profit or loss on a straight-line basis over the period of the lease.
When an operating lease is terminated before the lease period has expired, any penalty payment to be made to the lessor is recognised as an expense in the period in which termination takes place.

ING Bank as the lessor

When assets are held subject to a finance lease, 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 lease finance 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.

Acquisitions, goodwill and other intangible assets

Acquisitions and goodwill

ING Bank'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 Bank'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 Bank'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 Bank 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 Annual accounts 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.

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 annual accounts. 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 Bank 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 Bank and in case it is probable that there will be a cash outflow; a current tax liability is recognised.

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 for which ING Bank has the intention to sell the property after its completion is included in Other assets – Property development and obtained from foreclosures.

Property developed and under development for which ING Bank has the intention to sell the property under development after its completion and where there is not yet a specifically negotiated contract is measured at direct construction cost incurred up to the balance sheet date, including borrowing costs incurred during construction and ING Bank's own directly attributable development and supervision expenses less any impairment losses. Profit is recognised using the completed contract method (on sale date of the property). Impairment is recognised if the estimated selling price, less applicable variable selling expenses is lower than carrying value.

Property under development for which ING Bank has the intention to sell the property under development after its completion and where there is a specifically negotiated contract is valued using the percentage of completion method (pro rata profit recognition). The stage of completion is measured by reference to costs incurred to date as percentage of total estimated costs for each contract.

Property under development is stated at fair value (with changes in fair value recognised in the statement of profit or loss) if ING Bank has the intention to recognise the property under development after completion as real estate investments.

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’.

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 Bank 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 Bank; 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 Bank. 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.

Critical judgements and key estimation uncertainty:
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 Bank 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. Judgment is required to estimate the probability of an unfavourable outcome and the amount of potential loss. For the assessment of litigation provisions ING Bank 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 annual accounts. Reference is made to Note 44 'Legal proceedings'.

Key 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'.

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, trend rates in health care costs, 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 Bank pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Bank 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 post-employment healthcare and other 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.

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 Bank 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 using effective interest rate method'. Interest result on derivatives in so called economic hedges and instruments designated at fair value are presented in 'Other interest 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 Bank 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 Bank is the lessor are divided into an interest component (recognised as interest income) and a repayment component.

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 our 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. The fair value of equity-settled share-based payment transactions are measured at the grant 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.

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.

1.6 Parent company accounts

The parent company accounts of ING Bank 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 annual accounts.

Notes to the Consolidated statement of financial position

2 Cash and balances with central banks

Cash and balances with central banks

	2018	2017
Amounts held at central banks	47,655	19,687
Cash and bank balances	2,333	2,302
	49,987	**21,989**

In 2018, 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 40 '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	
	2018	2017	2018	2017	2018	2017
Loans	7,966	7,834	22,460	20,916	30,427	28,750
Cash advances, overdrafts and other balances	1	1	3	3	3	4
	7,967	**7,835**	**22,463**	**20,919**	**30,430**	**28,754**
Loan loss provisions	-5	-1	-5	-7	-9	-8
	7,962	**7,834**	**22,458**	**20,912**	**30,420**	**28,746**

Reference is made to Note 40 '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 4,713 million (2017: EUR 4,032 million).

As at 31 December 2018, Loans include receivables related to securities in reverse repurchase transactions amounting to EUR 6,686 million (2017: EUR 4,637 million) and receivables related to finance lease contracts amounting to EUR 51 million (2017: EUR 65 million). Reference is made to Note 41 'Transfer of financial assets' for information on securities lending as well as sale and repurchase transactions. Reference is made to Note 7 'Loans and advances to customers' for information on finance lease receivables.

As at 31 December 2018, the non-subordinated receivables amount to EUR 30,420 million (2017: EUR 28,703 million). Following IFRS 9 classification the subordinated receivables of 2017 related to securities at amortised cost amounting to EUR 43 million are classified as Securities at amortised cost.

No individual loans and advances to banks have terms and conditions that significantly affect the amount, timing or certainty of consolidated cash flows of the Bank. For details on significant concentrations, refer to Note 50 'Risk management – Credit risk' paragraph 'Credit Risk Appetite and Concentration Risk Framework'.

4 Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss

	2018	2017
Trading assets	50,163	116,763
Non-trading derivatives	2,672	2,185
Designated at fair value through profit or loss	2,887	4,242
Mandatorily measured at fair value through profit or loss	64,783	n/a
	120,505	**123,190**

At 1 January 2018, the classification of certain Loans and advances to customers and Debt instruments has changed to financial assets 'Mandatorily measured at fair value through profit or loss' due to the implementation of IFRS 9 (SPPI test). As per 1 January 2018 reverse repurchase portfolios that are managed and whose performance is evaluated on a fair value basis, amounting to EUR 54,825 million, were classified as financial assets 'Mandatorily measured at fair value through profit or loss', which were previously reported as 'Trading assets' and 'Assets designated as at fair value through profit or loss'. These reverse repurchase agreements are used by ING as part of its own regular treasury activities, but also relate to the role that ING plays as intermediary between different professional customers. The related repurchase financial liabilities, amounting to EUR 37,161 million, were classified as financial liabilities 'Designated at fair value through profit or loss'.
Reference is made to Note 41 'Transfer of financial assets' for information on securities lending as well as sale and repurchase transactions.

Trading assets

Trading assets by type

	2018	2017
Equity securities	8,909	13,681
Debt securities	5,213	7,477
Derivatives	22,110	27,444
Loans and receivables	13,931	68,161
	50,163	**116,763**

Trading assets and Trading liabilities include assets and liabilities that are classified under IFRS as Trading, but are closely related to servicing the needs of the clients of ING Bank. 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 are 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.
Loans and receivables in the trading portfolio mainly relate to (reverse) repurchase agreements, which are comparable to collateralised lending. 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.

As at 31 December 2018, Trading assets include receivables of EUR 12,939 million (2017: EUR 67,138 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

	2018	2017
Derivatives used in		
- fair value hedges	638	671
- cash flow hedges	1,012	617
- hedges of net investments in foreign operations	41	29
Other non-trading derivatives	982	868
	2,672	**2,185**

Reference is made to Note 37 'Derivatives and hedge accounting' for information on derivatives used for 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

	2018	2017
Equity securities		4
Debt securities	2,114	1,739
Loans and receivables	772	2,499
	2,887	**4,242**

Included in the 'Financial assets designated at fair value through profit or loss' is 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 1,364 million (2017: EUR 232 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 -23 million (2017: EUR -6 million) and the change for the current year amounts to EUR 17 million (2017: EUR 2 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.

As at 31 December 2018, Loans and receivables designated at fair value through profit or loss does not include any balances with regard to reverse repurchase transactions (2017: EUR 2,095 million).

Mandatorily at fair value through profit or loss

Mandatorily at fair value through profit or loss by type

	2018	2017
Equity securities	210	n/a
Debt securities	1,103	n/a
Loans and receivables	63,469	n/a
	64,783	**n/a**

Prior year, applying IAS 39, the majority of the equity and debt securities were classified as 'Investments – Available-for-sale'.

For details on ING Bank's exposure to debt securities reference is made to Note 6 'Securities at amortised cost'.

None of the equity securities are individually significant for ING Bank.

As at 31 December 2018, Loans and receivables mandatorily measured at fair value through profit or loss includes 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

	2018	2017
Equity securities	3,228	n/a
Debt securities[1]	25,616	n/a
Loans and advances[1]	2,379	n/a
	31,223	**n/a**
Available-for-sale investments	n/a	69,730
Held-to-maturity investments[2]	n/a	9,343
	31,223	**79,073**

1 Debt securities include an amount of EUR -6 million and the Loans and advances includes EUR -5 million 'Loan loss provisions'.
2 Under IFRS 9 these Investments are classified as Securities at amortised cost, reference is made to Note 6 'Securities at amortised cost'.

Exposure to equity securities

Equity securities designated as at fair value through other comprehensive income

	Carrying value 2018	Dividend income 2018
Investment in Bank of Beijing	1,967	83
Investment in Kotak Mahindra Bank	919	1
Other Investments	342	8
	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.

Changes in fair value through other comprehensive income financial assets

The following table presents changes in fair value of equity securities and debt instruments at fair value through other comprehensive income. The comparative amounts include equity securities and debt instruments that were classified as Available-for- sale investments under IAS 39.

Changes in fair value through other comprehensive income financial assets

	FVOCI equity securities		FVOCI debt instruments[1]		Total	
	2018	2017	2018	2017	2018	2017
Opening balance as at 1 January	3,983	4,024	65,747	78,888	69,730	82,912
Effect of changes in accounting policy	–184		–31,945		–32,129	
Additions	33	325	10,486	21,276	10,518	21,601
Amortisation			–12	–146	–12	–146
Transfers and reclassifications	1	7	1		2	7
Changes in unrealised revaluations[2]	–463	21	–660	–1,030	–1,123	–1,009
Impairments		–6				–6
Reversals of impairments			16	3	16	3
Disposals and redemptions	–178	–79	–15,478	–32,709	–15,656	–32,788
Exchange rate differences	35	–308	–159	–535	–124	–843
Changes in the composition of the group and other changes		–1	1		1	–1
Closing balance	**3,228**	**3,983**	**27,995**	**65,747**	**31,223**	**69,730**

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.

In the fourth quarter of 2018, ING reduced its stake in Kotak Mahindra Bank by 0.67% to 3.07% with the sale of 12.7 million shares for EUR 177 million. The fair value of the investment at the date of derecognition was EUR 984 million and the gain on disposal was EUR 3.6 million.

Reference is made to Note 6 'Securities at amortised cost' for details on ING Bank's exposure to debt securities and for further information on transfers and reclassifications of fair value through comprehensive income and amortised cost investments.
Reference is made to Note 24 'Investment income' for details on Impairments.

6 Securities at amortised cost

Securities at amortised cost

	2018	2017
Debt securities at amortised cost	47,276	n/a
Held-to-maturity investments[1]	n/a	9,343
	47,276	**9,343**

1 Under IAS 39 these Securities were classified as Held-to-maturity investments, reference is made to Note 5 'Financial assets at fair value through other comprehensive income'.

Exposure to debt securities

ING Bank's exposure to debt securities is included in the following lines in the statement of financial position:

Debt securities

	2018	2017
Debt securities at fair value through other comprehensive income	25,616	n/a
Debt securities at amortised cost	47,276	n/a
Available-for-sale investments	n/a	65,747
Held-to-maturity investments	n/a	9,343
Loans and advances to customers	n/a	5,099
Loans and advances to banks	n/a	201
Debt securities at fair value through other comprehensive income and amortised cost	**72,893**	**80,390**
Trading assets	5,213	7,477
Debt securities at fair value through profit or loss	3,218	1,739
Financial assets at fair value through profit or loss	**8,431**	**9,216**
	81,323	**89,606**

At 1 January 2018, the classification of certain Loans and advances to banks and Loans and advances to customers has changed to Securities at amortised cost based on the characteristics of these instruments.

ING Bank's total exposure to debt securities of EUR 76,111 million (31 December 2017: EUR 82,129 million) is specified as follows:

Debt securities by type of exposure

	Debt Securities at FVPL	Debt securities at FVOCI	Debt securities at AC	Total	Total
	2018	2018	2018	2018	2017[1]
Government bonds	142	15,580	24,659	40,381	43,561
Sub-sovereign, Supranationals and Agencies	467	5,928	11,244	17,639	19,077
Covered bonds		2,245	6,722	8,967	9,409
Corporate bonds	23	485	765	1,273	2,254
Financial institutions' bonds	1,527	460	2,415	4,402	3,434
ABS portfolio	1,059	924	1,483	3,466	4,394
	3,218	**25,622**	**47,288**	**76,128**	**82,129**
Loan loss provisions		–6	–11	–17	n/a
Bond portfolio	**3,218**	**25,616**	**47,276**	**76,111**	**82,129**

1 Amounts have been restated to conform to the current year presentation.

Approximately 99% (2017: 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	
	2018	2017	2018	2017	2018	2017
Loans to, or guaranteed by, public authorities	24,547	26,975	17,257	19,397	41,803	46,372
Loans secured by mortgages	119,939	121,702	219,983	204,883	339,922	326,585
Loans guaranteed by credit institutions	209	279	2,901	1,722	3,110	2,001
Personal lending	3,304	3,162	21,563	20,074	24,867	23,236
Asset backed securities				2,209		2,209
Corporate loans	37,331	38,550	149,787	140,461	187,117	179,011
	185,329	**190,668**	**411,490**	**388,746**	**596,819**	**579,414**
Loan loss provisions	–1,480	–1,693	–3,011	–2,822	–4,491	–4,515
	183,849	**188,975**	**408,479**	**385,924**	**592,328**	**574,899**

As at 31 December 2018, Loans and advances to customers includes receivables with regard to securities which have been acquired in reverse repurchase transactions amounting to EUR 266 million (2017: EUR 421 million).

Reference is made to Note 41 'Transfer of financial assets' for information on securities lending as well as sale and repurchase transactions.

Loans and advances to customers by subordination

	2018	2017
Non-subordinated	592,208	574,919
Subordinated	120	480
	592,328	**574,899**

No individual loan or advance has terms and conditions that significantly affect the amount, timing or certainty of the consolidated cash flows of the Bank. For details on significant concentrations, refer to Note 50 'Risk management – Credit risk' paragraph 'Credit Risk Appetite and Concentration Risk Framework'.

The following table show the reconciliations from the opening to the closing balance of the loan loss provision.

Changes in loan loss provisions[1]

					2018	2017
	12-month ECL (Stage 1)	Lifetime ECL not credit impaired (stage 2)	Lifetime ECL credit impaired (stage 3)	Purchased credit impaired	Total[2]	Total
Opening balance as at 1 January IAS 39					**4,521**	**5,308**
Effect of changes in accounting policy					795	
Opening balance as at 1 January IFRS 9	**438**	**955**	**3,916**	**7**	**5,316**	
Transfer into 12-month ECL	19	–206	–23		–209	
Transfer into lifetime ECL not credit impaired	–62	501	–56		383	
Transfer into lifetime ECL credit impaired	–7	–86	707		615	
Net remeasurement of loan loss provision	17	–55	312		274	
New financial assets originated or purchased	213				212	
Financial assets that have been derecognised	–101	–145	–341		–588	
Changes in models						
Increase in loan loss provisions	**80**	**9**	**599**		**688**	**676**
Write-offs			–1,043		–1,044	–1,279
Recoveries of amounts previously written off			53		53	59
Foreign exchange and other movements	–18	–38	–386	–4	–446	–136
Closing balance	**500**	**925**	**3,139**	**2**	**4,568**	**4,628**

1 At the end of December 2018, the stock of provisions included provisions for loans and advances to central banks (EUR 3 million), loans and advances to banks (EUR 9 million), financial assets at FVOCI (EUR 11 million), securities at amortised cost (EUR 11 million), provisions for loans and advances to customers (EUR 4,491 million) and provisions for contingent liabilities (credit replacements) recorded under Provisions (EUR 42 million).

2 The 2018 changes in loan loss provision presents IFRS 9 expected credit losses (excluding IAS 37 provisions for non-credit replacement positions (1 January 2018: EUR 107 million), The IAS 39 comparative 2017 amount includes IAS 37 provision for all off balance positions.

The Addition to loan loss provisions in the Consolidated statement of profit or loss (EUR 656 million) relates to the increase in the loan loss provisions (EUR 688 million) and the release related to the IAS 37 non-credit replacement off-balance positions (EUR 32 million included in Note 16 'Provisions').

For details on credit qualities, refer to Note 50 'Risk management – Credit risk' paragraph 'Credit quality – Loan loss provisioning.

The following table provides information on financial assets that were modified while they had a loss allowance measured at an amount equal to lifetime ECL.

Financial assets modified

	2018
Financial assets modified during the period	
Amortised cost before modification	2,503
Net modification loss	–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	908

Loans and advances to customers and Loans and advances to banks include finance lease receivables and are detailed as follows:

Finance lease receivables

	2018	2017
Maturities of gross investment in finance lease receivables		
- within 1 year	2,374	2,729
- more than 1 year but less than 5 years	5,959	6,215
- more than 5 years	1,646	2,897
	9,979	**11,841**
Unearned future finance income on finance leases	–673	–1,082
Net investment in finance leases	**9,306**	**10,759**
Maturities of net investment in finance lease receivables		
- within 1 year	2,193	2,474
- more than 1 year but less than 5 years	5,581	5,652
- more than 5 years	1,532	2,633
	9,306	**10,759**
Included in Loans and advances to banks	51	65
Included in Loans and advances to customers	9,256	10,694
	9,306	**10,759**

Expected credit losses for uncollectable finance lease receivables of EUR 150 million as at 31 December 2018 (2017: EUR 337 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 5 million, stage 2: EUR 11 million and stage 3: 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 Bank.

8 Investments in associates and joint ventures

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	25	649	832	23,494	20,884	1,055	722
Other investments in associates and joint ventures			212				
			1,044				

Investments in associates and joint ventures

2017	Interest held (%)	Fair value of listed investments	Balance sheet value	Total assets	Total liabilities	Total income	Total expenses
TMB Public Company Limited	25	842	737	21,251	19,004	711	507
Other investments in associates and joint ventures			210				
			947				

TMB Public Company Limited (TMB) is an associate in which ING Bank holds a 25% ownership interest. 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).

Other investments in associates and joint ventures are mainly financial services and financial technology funds or vehicles operating predominantly in Europe.

ING Bank does not hold any interests in Investments in Associates and joint ventures that are individually significant to ING Bank. Other investments in associates and joint ventures represents a large number of associates and joint ventures with an individual statement of financial position 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 Bank'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 Bank, but by no more than three months.

Accumulated impairments of EUR 15 million (2017: EUR 33 million) have been recognised. The values presented in the tables above could differ from the values presented in the individual annual accounts of the associates and joint ventures, due to the fact that the individual values have been brought in line with ING Bank's accounting principles. Where the listed fair value is lower than the statement of financial position value, an impairment review and an evaluation of the going concern basis has been 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 dependant 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

	2018	2017
Opening balance	947	1,003
Effect of changes in accounting policy	–23	
Additions	97	79
Transfers to and from Investments/Other assets and liabilities	5	–1
Revaluations	–2	–8
Share of results	127	166
Dividends received	–27	–29
Disposals	–116	–245
Impairments	–3	
Exchange rate differences	39	–18
Closing balance	**1,044**	**947**

In 2018, Share of results from associates and joint ventures of EUR 127 million as presented in the statement of profit or loss and the table above, is mainly attributable to results of TMB of EUR 98 million.

In 2017, Share of results from associates and joint ventures of EUR 166 million as presented in the statement of profit or loss and the table above, is mainly attributable to results of TMB, EUR 56 million and a gain of EUR 97 million on the sale of shares in Appia Group Ltd UK.

In 2017 Disposals of EUR 245 million is mainly attributable to the sale of Appia Group Ltd UK of EUR 146 million.

9 Property and equipment

Property and equipment by type

	2018	2017
Property in own use	780	774
Equipment	879	917
Assets under operating leases		110
	1,659	**1,801**

ING uses external valuers to value property in own use. All properties are typically appraised by external valuers once every five years.

Assets subject to operating leases have been reclassified to finance lease, as the contracts of the operating lease portfolio includes purchase options at prices sufficiently lower than the expected market values at the end of the lease periods. These contracts meet the definition of a finance lease in terms of IAS 17 and have been accounted for at their net investment value as part of finance lease receivables.

Changes in property in own use

	2018	2017
Opening balance	774	881
Additions	5	5
Reclassifications		
– Transfers to and from Investment properties	11	
Amounts recognised in the statement of profit or loss for the year		
– Depreciation	–14	–13
– Impairments	–4	–8
– Reversal of impairments	17	24
	–1	3
Revaluations recognised in equity during the year	23	42
Disposals	–12	–145
Exchange rate differences	–20	–12
Closing balance	**780**	**774**
Gross carrying amount as at 31 December	1,320	1,324
Accumulated depreciation as at 31 December	–387	–376
Accumulated impairments as at 31 December	–153	–174
Net carrying value as at 31 December	**780**	**774**
Revaluation surplus		
Opening balance	279	256
Revaluation in the year	1	23
Closing balance	**280**	**279**

The cost or the purchase price amounted to EUR 1,040 million (2017: EUR 1,044 million). Cost or the purchase price less accumulated depreciation and impairments would have been EUR 500 million (2017: EUR 495 million) had property in own use been valued at cost instead of at fair value.

In 2017, disposals of EUR –145 million are mainly attributable to the sale of office buildings in Belgium.

Changes in equipment

	Data processing equipment		Fixtures and fittings and other equipment		Total	
	2018	2017	2018	2017	2018	2017
Opening balance	291	323	626	692	917	1,015
Additions	148	129	136	130	284	259
Disposals	–1	–1	–4	–12	–5	–13
Depreciation	–133	–133	–164	–174	–298	–307
Impairments	–4		–1	–2	–5	–2
Exchange rate differences	–8	–8	–5	–5	–13	–13
Changes in the composition of the group and other changes	–4	–19	1	–3	–2	–22
Closing balance	**290**	**291**	**589**	**626**	**879**	**917**
Gross carrying amount as at 31 December	1,346	1,275	2,305	2,249	3,651	3,524
Accumulated depreciation as at 31 December	–1,055	–983	–1,716	–1,623	–2,771	–2,606
Accumulated impairments as at 31 December	–1	–1			–1	–1
Net carrying value as at 31 December	**290**	**291**	**589**	**626**	**879**	**917**

10 Intangible assets

Changes in intangible assets

	Goodwill		Software		Other		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Opening balance	816	903	648	571	5	10	1,469	1,484
Additions	202		95	72			297	72
Capitalised expenses			286	192			286	192
Amortisation			–204	–173	–5	–6	–209	–179
Impairments			–12	–30			–12	–30
Exchange rate differences	–99	–87	–5				–104	–87
Disposals				–9				–9
Changes in the composition of the group and other changes			59	25	52	1	111	26
Closing balance	**918**	**816**	**868**	**648**	**53**	**5**	**1,839**	**1,469**
Gross carrying amount as at 31 December	918	816	2,359	1,902	60	30	3,338	2,748
Accumulated amortisation as at 31 December			–1,487	–1,225	–5	–23	–1,492	–1,248
Accumulated impairments as at 31 December			–4	–29	–2	–2	–6	–31
Net carrying value as at 31 December	**918**	**816**	**868**	**648**	**53**	**5**	**1,839**	**1,469**

Goodwill

Goodwill is allocated to groups of cash generating units (CGUs) as follows:

Goodwill allocation to Bank of CGUs

Group of CGU's	Method used for recoverable amount	Discount rate	Long term growth rate	Goodwill 2018	Goodwill 2017
Retail Netherlands	Values in use	6.50%	1.01%	14	
Retail Belgium	Values in use	7.20%	1.01%	50	50
Retail Germany	Values in use	6.50%	1.01%	349	349
Retail Growth Markets [1, 2]	Fair value less cost of disposal			231	307
Wholesale Banking [1]	Values in use	7.72%	1.32%	274	110
				918	**816**

1 Goodwill related to Growth Countries is allocated across two groups of CGUs, EUR 230 million to Retail Growth Markets and EUR 67 million to Wholesale Banking (2017: EUR 307 million to Retail Growth Markets and EUR 90 million to Wholesale Banking).
2 The fair value less cost of disposal is based on Level 1 and Level 2 inputs.

Changes in the goodwill in 2018 mainly 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 45 'Consolidated companies and businesses acquired and divested' for further information on the acquisitions that took place in 2018 and the goodwill recognised.

No goodwill impairment was recognised in 2018 (2017: nil).

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 Bank. 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 2018 and 2017 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 624 million (2017: EUR 477 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 45 'Consolidated companies and businesses acquired and divested' for further information on the acquisitions that took place in 2018 and the assets and liabilities recognised.

11 Other assets

Other assets by type

	2018	2017
Net defined benefit assets	527	542
Investment properties	54	65
Property development and obtained from foreclosures	124	137
Accrued interest and rents[1]	51	4,533
Other accrued assets	732	753
Amounts to be settled	4,248	4,072
Other	2,688	2,960
	8,426	**13,062**

1 As per 1 January 2018 accrued interest is included in the corresponding balance sheet item of the host contract, reference is made to note 1 Accounting policies. The remaining balance consists primarily of prepaid rents.

Disclosures in respect of Net defined benefit assets are provided in Note 34 'Pension and other post-employment benefits'.

Amounts to be settled

Amounts to be settled are primarily transactions not settled at the balance sheet date. They are short term in nature and are expected to settle shortly after the balance sheet date.

Other

Other assets - Other relates mainly to other receivables in the normal course of business and include, amongst others, accruals for mortgage and credit card repayments. For 2018, this also includes a receivable at the Dutch level (from NN Group) regarding tax due by ING Australia Holdings Ltd related to the years 2007-2013, for which a full reimbursement is expected to be received from NN Group. As of 31 December 2018 the receivable due from NN Group including interest amounts to EUR 107 million.

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. As at 31 December 2018 this relates to the intended sale of part of the ING Lease Italy business, for which the transaction was not closed yet.

The assets held for sale are composed of lease receivables that were previously classified as Loans and advances to customers.

Reference is made to Note 25 'Result on disposal of group companies' and to Note 45 '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	
	2018	2017	2018	2017	2018	2017
Non-interest bearing	22	181	412	363	434	544
Interest bearing	17,211	17,230	19,686	19,047	36,896	36,277
	17,233	**17,411**	**20,097**	**19,410**	**37,330**	**36,821**

Deposits from banks includes ING's participation in the targeted longer-term refinancing operations (TLTRO) with EUR 10.7 billion in 2016 and an additional EUR 7 billion in 2017. 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.

Reference is made to Note 41 'Transfer of financial assets' for information on securities lending as well as sale and repurchase transactions.

14 Customer deposits

Customer deposits

	2018	2017
Savings accounts	322,795	319,659
Credit balances on customer accounts	202,168	186,455
Corporate deposits	36,735	39,655
Other	18,597	6,921
	580,294	**552,690**

Customer deposits by type

	Netherlands		International		Total	
	2018	2017	2018	2017	2018	2017
Non-interest bearing	16,901	15,963	25,342	21,688	42,242	37,651
Interest bearing	180,446	164,140	357,607	350,899	538,053	515,039
	197,346	**180,103**	**382,949**	**372,587**	**580,294**	**552,690**

Savings accounts relate to the balances on savings accounts, savings books, savings deposits, and time deposits of private individuals. The interest payable on savings accounts, which is contractually added to the accounts, is also included.

In 2018, Customer deposits includes EUR 24.1 billion of deposits received from ING Group.

Reference is made to Note 41 'Transfer of financial assets' for information on securities lending as well as sale and repurchase transactions

15 Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss

	2018	2017
Trading liabilities	31,215	73,596
Non-trading derivatives	2,313	2,346
Designated at fair value through profit or loss	59,179	11,215
	92,707	**87,157**

At 1 January 2018, repurchase financial liabilities that are managed and whose performance is evaluated on a fair value basis, amounting to EUR 37,161 million, were classified as financial liabilities 'Designated at fair value through profit or loss', which were previously reported as 'Trading liabilities'. The related reverse repurchase portfolios, amounting to EUR 54,825 million, are classified as financial assets 'Mandatorily measured at fair value through profit or loss'.

Trading liabilities

Trading liabilities by type

	2018	2017
Equity securities	355	601
Debt securities	5,363	5,126
Funds on deposit	3,968	41,956
Derivatives	21,528	25,913
	31,215	**73,596**

As at 31 December 2018, Trading liabilities include funds on deposit of EUR 3,227 million (2017: EUR 41,436 million) with regard to repurchase transactions.

Reference is made to Note 41 'Transfer of financial assets' for information on securities lending as well as sale and repurchase transactions.

Non-trading derivatives

Non-trading derivatives by type

	2018	2017
Derivatives used in:		
– Fair value hedges	1,029	1,083
– Cash flow hedges	458	339
– Hedges of net investments in foreign operations	17	71
Other non-trading derivatives	809	853
	2,313	**2,346**

Reference is made to Note 37 '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 which no hedge accounting is applied.

Designated at fair value through profit or loss

Designated at fair value through profit or loss by type

	2018	2017
Debt securities	7,944	8,896
Funds entrusted	50,921	1,780
Subordinated liabilities	313	539
	59,179	**11,215**

As at 31 December 2018, financial liabilities designated as at fair value through profit or loss include funds entrusted of EUR 49,010 million with regard to repurchase transactions.

As at 31 December 2018, 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 18 million (2017: EUR 248 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). In 2018, in accordance with IFRS 9, the changes in own credit risk are recognised in OCI net of tax.

The amount that ING Bank 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 9,640 million (2017: EUR 10,733 million).

16 Provisions

Provisions by type

	2018	2017
Reorganisation provisions	613	1,097
Other provisions	399	616
	1,011	**1,713**

Reorganisation provisions

Changes in reorganisation provisions

	2018	2017
Opening balance	1,097	1,482
Additions	53	53
Unused amounts reversed	–49	–58
Utilised	–487	–369
Exchange rate differences		–1
Other changes	–2	–10
Closing balance	**613**	**1,097**

In 2017 and 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	
	2018	2017	2018	2017	2018	2017
Opening balance	365	353	251	193	616	546
Effect of changes in accounting policy			11		11	
Additions	59	186	35	135	95	321
Interest			1		1	
Unused amounts reversed	–76	–90	–37	–73	–113	–163
Utilised	–186	–82	–28	–23	–214	–105
Exchange rate differences	–4	–3	1	–8	–3	–11
Other changes	6	1		27	6	28
Closing balance	**165**	**365**	**234**	**251**	**399**	**616**

In 2018, Other provisions – other includes provisions related to contingent liabilities amounting to EUR 122 million, of which EUR 42 million relates to credit replacement facilities and EUR 80 million relates to non-credit replacement facilities. As at 31 December 2018 amounts expected to be settled within twelve months, amount to EUR 194 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.

Included in Other provisions – Litigation in 2018 and 2017, is a provision related to floating interest rate derivatives that were sold in the Netherlands. Also included in this column in 2018 and 2017, is a provision recognised for reimbursement of expenses associated with the formalisation of mortgages at ING Spain.

Reference is made to Note 28 'Other operating expenses' and Note 44 'Legal proceedings'.

17 Other liabilities

Other liabilities by type

	2018	2017
Net defined benefit liability	421	476
Other post-employment benefits	76	87
Other staff-related liabilities	473	504
Other taxation and social security contributions	403	479
Accrued interest and rents[1]	61	3,601
Costs payable	2,272	2,600
Amounts to be settled	6,026	4,993
Other	3,664	3,232
	13,396	**15,972**

1 As per 1 January 2018 accrued interest is included in the corresponding balance sheet item of the host contract, reference is made to Note 1 Accounting policies.

Disclosures in respect of Net defined benefit liabilities are provided in Note 34 '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.

Amounts to be settled

Amounts to be settled are primarily transactions not settled at the balance sheet date. They are short term in nature and are expected to settle shortly after the balance sheet date.

Other

Other liabilities – Other relates mainly to year-end accruals in the normal course of business. This represents mainly 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 Bank, 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 Bank 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

	2018	2017
Fixed rate debt securities		
Within 1 year	32,626	29,296
More than 1 year but less than 2 years	7,766	7,084
More than 2 years but less than 3 years	10,267	7,629
More than 3 years but less than 4 years	5,488	8,369
More than 4 years but less than 5 years	3,123	5,432
More than 5 years	11,137	8,038
Total fixed rate debt securities	**70,406**	**65,848**
Floating rate debt securities		
Within 1 year	22,684	15,091
More than 1 year but less than 2 years	4,134	3,932
More than 2 years but less than 3 years	1,587	1,341
More than 3 years but less than 4 years	130	278
More than 4 years but less than 5 years	165	150
More than 5 years	3,054	3,591
Total floating rate debt securities	**31,753**	**24,383**
Total debt securities[1]	**102,159**	**90,231**

1 Per 1 January 2018 the debt securities in issue includes accrued interest (EUR 0.7 billion), reference is made to Note 1 'Accounting policies'.

In 2018, the increase in Debt securities in issue of EUR 11.2 billion is mainly attributable to an increase in commercial paper of EUR 12.9 billion, certificates of deposit of EUR 1.7 billion and covered bonds of EUR 0.9 billion, partially offset by a decrease in other Debt securities in issue of EUR 2.3 billion and long term maturity bonds of EUR 2.0 billion.

19 Subordinated loans

Subordinated loans relate to subordinated capital debentures and private loans which may be included in the calculation of the capital ratio.

Subordinated loans include loans that qualify as Tier 1 capital. These loans have been placed with ING Bank N.V. by ING Groep N.V.

Changes in subordinated loans

	2018	2017
Opening balance	15,831	16,104
Effect of changes in accounting policy	170	
New issuances	1,828	2,314
Repayments	–4,594	–1,246
Exchange rate differences and other	408	–1,341
Closing balance	**13,643**	**15,831**

In March 2018 ING Groep N.V. issued EUR 750 million and USD 1,250 million securities that qualify as subordinated CRD IV Tier 2 notes with coupon of 2.00% until 22 March 2030 and 4.70% until 22 March 2028 respectively. Both issuances are placed with ING Bank N.V. under the same conditions.

In May 2018 ING redeemed the EUR 1,000 million 6.125% and the GBP 800 million 6.875% Tier 2 Debt Securities. In November ING redeemed the EUR 1,057 million 3.50% and the USD 2,058 million 4.125% Tier 2 Debt Securities.

The average interest rate on subordinated loans is 4.40% (2017: 4.65%). The interest expense during the year 2018 was EUR 700 million (2017: EUR 756 million).

For additional information, reference is made to the Parent company annual accounts, Note 16 'Subordinated loans'.

Equity

20 Equity

Total equity

	2018	2017	2016
Share capital and share premium			
- Share capital	525	525	525
- Share premium	16,542	16,542	16,542
	17,067	**17,067**	**17,067**
Other reserves			
- Revaluation reserve: Available-for-sale and other	n/a	3,449	3,832
- Revaluation reserve: Equity securities at FVOCI	1,914	n/a	n/a
- Revaluation reserve: Debt instruments at FVOCI	365	n/a	n/a
- Revaluation reserve: Cash flow hedge	604	263	777
- Revaluation reserve Credit liability	8	n/a	n/a
- Revaluation reserve: Property in own use	202	201	201
- Net defined benefit asset/liability remeasurement reserve	–394	–400	–371
- Currency translation reserve	–2,068	–1,682	–791
- Share of associates and joint ventures and other reserves	2,872	2,473	2,187
	3,504	**4,304**	**5,835**
Retained earnings	**23,602**	**22,291**	**20,638**
Shareholders' equity (parent)	**44,173**	**43,662**	**43,540**
Non-controlling interests	803	715	606
Total equity	**44,976**	**44,377**	**44,146**

The following components of equity, as included in Other reserves, cannot be freely distributed: Revaluation reserve, Net defined benefit asset/liability remeasurement reserve, Currency translation reserve, Share of associates and joint ventures reserve and the part of Other reserves that relates to the former Stichting Regio Bank and the former Stichting Vakbondsspaarbank SPN.

Share capital and share premium

Share capital

Share capital

	Ordinary shares (par value EUR 1.13)					
	Number x 1,000			Amount		
	2018	2017	2016	2018	2017	2016
Authorised share capital	1,600,000	1,600,000	1,600,000	1,808	1,808	1,808
Unissued share capital	1,134,965	1,134,965	1,134,965	1,283	1,283	1,283
Issued share capital	**465,035**	**465,035**	**465,035**	**525**	**525**	**525**

No change occurred in the issued share capital and share premium in 2018, 2017 and 2016.

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, subject to the approval of the general meeting of ING Bank. The par value of ordinary shares is EUR 1.13.

The authorised ordinary share capital of ING Bank N.V. consists of 1,600 million shares of which as at 31 December 2018, 465 million ordinary shares were issued and fully paid.

ING Bank has 50 authorised preference shares with par value of EUR 1.13 per preference share. As at 31 December 2018, 7 preference shares were issued and fully paid (2017: 7 preference shares; 2016: 7 preference shares) amounting to EUR 8 (2017: EUR 8 and 2016: EUR 8).

Dividend restrictions

ING Bank 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 Bank 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 subsidiaries operate, other limitations exist in certain countries.

Other reserves

Revaluation reserves

Changes in revaluation reserves

	AFS and other			Equity securities at FVOCI			Debt instruments at FVOCI			Cash flow hedge			Credit liability			Property in own use		
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
Opening balance	3,449	3,832	3,896	n/a	n/a	n/a	n/a	n/a	n/a	263	777	675	n/a	n/a	n/a	201	201	326
Effect of changes in accounting policy	–3,449			2,432			581						–190					
Changes in credit liability reserve													198					
Unrealised revaluations		–293	208	–461			–163			342	–514	102				3	26	2
Realised gains/losses transferred to the statement of profit or loss		–90	–272				–54											
Changes in composition of the group and other changes				–56												–2	–26	–127
Closing balance	**n/a**	**3,449**	**3,832**	**1,914**	**n/a**	**n/a**	**365**	**n/a**	**n/a**	**604**	**263**	**777**	**8**	**n/a**	**n/a**	**202**	**201**	**201**

Available-for-sale and other

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.

Following the purchase of VISA Europe by VISA Inc. in 2016, the available-for-sale equity securities were derecognised from the statement of financial position with a corresponding release of the Available-for-sale revaluation reserve recognised in Equity of EUR 154 million. Reference is made to Note 24 'Investment income'.

Equity securities at FVOCI

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. The EUR -56 million is a transfer of revaluation reserve to retained earnings.

Property in own use

In 2018, 2017 and 2016 respectively the EUR -2 million, EUR –26 million and EUR –127 million is a transfer of revaluation reserve to retained earnings.

Net defined benefit asset/liability remeasurement reserve

Reference is made to Note 34 ‘Pension and other post-employment benefits’.

Currency translation reserve

Changes in Currency translation reserve

	2018	2017	2016
Opening balance	–1,682	–791	–540
Unrealised revaluations	71	192	–76
Exchange rate differences	–457	–1,083	–175
Closing balance	**–2,068**	**–1,682**	**–791**

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 decrease in currency translation reserve of EUR 386 million is mainly caused by exchange rate differences in TRY and USD, which are not or only partly hedged.

Share of associates, joint ventures and other reserves

Changes in share of associates, joint ventures and other reserves

	2018	2017	2016
Opening balance	2,473	2,187	1,733
Effect of changes in accounting policy	–23		
Result for the year	160	153	124
Changes in composition of the group and other changes	261	133	330
Closing balance	**2,872**	**2,473**	**2,187**

Retained earnings

Changes in retained earnings

	2018	2017	2016
Opening balance	22,291	20,638	18,006
Effect of changes in accounting policy	–391		
Transfer to/from other reserves	–192	–	–
Result for the year	4,447	4,866	4,103
Dividend	–2,517	–3,176	–1,345
Employee stock options and share plans	59	69	72
Changes in composition of the group and other changes	–96	–106	–198
Closing balance	**23,602**	**22,291**	**20,638**

In 2018, a cash dividend of EUR 2,517 million (2017: EUR 3,176 million and 2016: EUR 1,345 million) was paid to the shareholder of ING Bank.

Notes to the Consolidated statement of profit or loss

21 Net interest income

Net interest income

	2018	2017	2016
Interest income on loans	19,390	18,405	18,457
Interest income on financial assets at fair value through OCI	554	n/a	n/a
Interest income on financial assets at amortised cost	378	n/a	n/a
Interest income on non-trading derivatives (hedge accounting)	4,491	n/a	n/a
Negative interest on liabilities	475	526	191
Interest income using effective interest rate method	25,288	n/a	n/a
Interest income on financial assets at fair value through profit or loss	1,795	n/a	n/a
Interest income on investments	n/a	1,494	1,756
Interest income on trading derivatives	n/a	16,109	16,081
Interest income on other trading portfolio	n/a	1,028	728
Interest income on non-trading derivatives (no hedge accounting)	683	629	666
Interest income on non-trading derivatives (hedge accounting)	n/a	5,660	6,213
Interest income other	25	137	129
Other interest income	2,504	n/a	n/a
Interest income	**27,792**	**43,988**	**44,221**

	2018	2017	2016
Interest expense on deposits from banks	362	301	283
Interest expense on customer deposits	2,890	2,766	3,161
Interest expense on debt securities in issue	2,033	1,910	2,174
Interest expense on subordinated loans	700	756	780
Negative interest on assets	412	407	184
Interest expense on non-trading derivatives (hedge accounting)	4,826	5,946	6,720
Interest expense using effective interest rate method	11,222	n/a	n/a
Interest expense on financial liabilities at fair value through profit or loss	1,577	n/a	n/a
Interest expense on trading derivatives	n/a	16,118	16,263
Interest expense on other trading liabilities	n/a	744	210
Interest expense on non-trading derivatives (no hedge accounting)	1,011	929	766
Interest expense other	33	329	363
Other interest expense	2,620	n/a	n/a
Interest expense	**13,842**	**30,206**	**30,904**
Net interest income	**13,949**	**13,782**	**13,317**

Total Net interest income of EUR 13,949 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 current reporting period.
To further enhance the relevance of the interest disclosures, ING Bank changed its separate presentation 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.

To explain the impact of this change in presentation the table below provides a reconciliation between the 'Net interest income' and 'Valuation results and net trading income' as reported in 2017 and the comparable amounts applying the 2018 accounting policies.

Impact of adoption of IFRS 9 on Interest income and expense presentation

	Reported as at 31 December 2017	Reclassification of interest related to trading assets/liabilities	2017 on comparable basis to 2018	Reported as at 31 December 2018
Total interest income	43,988	–17,136	26,852	27,792
Total interest expense	–30,206	16,862	–13,344	–13,842
Net interest income	13,782	–274	13,508	13,949
Valuation results and net trading income	672	274	946	1,031

Refer to Note 23 'Valuation and result and net trading income' for the interest income and expense from trading assets and liabilities recognised in 2018.

22 Net fee and commission income

Fee and commission income

	2018	2017	2016
Funds transfer	1,394	1,171	1,103
Securities business	618	532	497
Insurance broking	173	176	181
Asset management fees	170	116	91
Brokerage and advisory fees	584	548	477
Other	1,302	1,321	1,232
	4,240	**3,864**	**3,581**

Other, mainly consists of commission fees in respect of bank guarantees of EUR 207 million (2017: EUR 209 million; 2016: EUR 202 million), in respect of underwriting syndication loans of EUR 4 million (2017: EUR 52 million; 2016: EUR 44 million), in respect of structured finance fees of EUR 129 million (2017: EUR 136 million; 2016: EUR 110 million), and in respect of collective instruments distributed but not managed by ING of EUR 165 million (2017: EUR 165 million; 2016: EUR 145 million).

Fee and commission expenses

	2018	2017	2016
Funds transfer	597	436	403
Securities business	170	150	166
Insurance broking	2	4	8
Asset management fees	4	5	5
Brokerage and advisory fees	220	192	166
Other	443	363	400
	1,437	**1,150**	**1,148**

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 32 '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

	2018	2017	2016
Securities trading results	–722	656	–369
Derivatives trading results	540	59	706
Change in fair value of derivatives relating to			
– fair value hedges	62	729	241
– cash flow hedges (ineffective portion)	–19	44	–16
– other non-trading derivatives	896	–1,147	1,709
Change in fair value of assets and liabilities (hedged items)	–54	–824	–223
Valuation results on assets and liabilities designated at FVPL (excluding trading)	257	–56	–79
Foreign exchange transactions results	72	1,202	–900
Other	–2	9	24
	1,031	**672**	**1,093**

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.

The portion of trading gains and losses relating to trading securities still held as at 31 December 2018 amounts to EUR 396 million (2017: EUR -68 million; 2016: EUR -232 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.

In 2018, Derivatives trading results include EUR -20 million CVA/DVA adjustments on trading derivatives (2017: EUR 47 million; 2016: EUR 36 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 37 '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. Furthermore, as of 1 January 2018, fair value changes on financial assets mandatorily measured at fair value through profit or loss are included.

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 and changes in own credit risk as disclosed in Note 15 'Financial liabilities at fair value through profit or loss'. Market conditions include in particular credit spread developments.

In 2018, 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 301 million (2017: EUR -105 million; 2016: EUR -70 million). DVA adjustment on own issued notes is no longer included in Valuation results (2017: EUR -79 million; 2016: EUR -50 million). In 2018, in accordance with IFRS 9, the DVA adjustments on own issued notes are recognised in OCI.

Interest income from trading assets in 2018 amounted to EUR 13,924 million.
Interest expense from trading liabilities in 2018 amounted to 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

	2018[1]	2017	2016
Dividend income	**102**	**80**	**87**
Realised gains/losses on disposal of debt instruments measured at FVOCI	77	n/a	n/a
Realised gains/losses on disposal of Available-for-sale debt securities	n/a	64	107
Impairments of Available-for-sale debt securities	n/a		
Reversal of impairments of Available-for-sale debt securities	n/a	3	
Realised gains/losses and impairments of debt instruments measured at FVOCI	**77**	**67**	**107**
Realised gains/losses on disposal of Available-for-sale equity securities	n/a	48	236
Impairments of Available-for-sale equity securities	n/a	–6	–13
Realised gains/losses and impairments of Available-for-sale equity securities	**n/a**	**42**	**223**
Income from and fair value gains/losses on investment properties	4	3	4
Investment income	**183**	**192**	**421**

1 The adoption of IFRS 9 led to new presentation requirements for 2018; prior period amounts have not been restated. Reference is made to Note 1 'Accounting policies'.

In 2018 and 2017, Dividend income mainly consists of dividend received from ING's equity stake in Bank of Beijing.

In 2016, Dividend income mainly consists of dividend received from ING's equity stake in Bank of Beijing and dividend received as a result of the merger between Equens SE and Worldline (EUR 16 million).

In 2016, Realised gains/losses on disposal of equity securities included EUR 163 million mainly comprising the gain on disposal of the shares held in VISA Europe Limited. For further information on the disposal of shares held in VISA Europe Limited, reference is made to Note 8 'Share of associates and joint ventures', and Note 20 'Equity'.

Impairments and reversals of impairments on investments are presented within Investment income, which is part of Total income.

Impairments and reversals of impairment on investments per segment[1]

	Impairments			Reversal of impairments		
	2018	2017	2016	2018	2017	2016
Wholesale Banking		–5	–8		3	
Corporate Line Banking		–1	–5			
	n/a	**–6**	**–13**	**n/a**	**3**	

1 The adoption of IFRS 9 led to new presentation requirements for 2018; prior period amounts have not been restated. Reference is made to Note 1 'Accounting policies'.

25 Result on disposal of group companies

Result on disposal of group companies

	2018	2017	2016
Baring Private Equity Partners		1	1
ING Lease Italy	–123		
	–123	**1**	**1**

In 2018 the Result on disposal of group companies includes the result (fair value less cost to sell) on the intended sale of part of the ING Lease Italy business amounting to EUR -123 million.

In 2017 and 2016 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 2018, Other income of EUR 136 million (2017: EUR 349 million; 2016: EUR 172 million) is mainly impacted by positive results on the sale of commodity goods and property and upfront income of independent agents. 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

	2018	2017	2016
Salaries	3,287	3,273	3,224
Pension costs and other staff-related benefit costs	385	381	344
Social security costs	509	499	512
Share-based compensation arrangements	59	70	72
External employees	901	716	636
Education	87	76	70
Other staff costs	202	183	178
	5,430	**5,198**	**5,036**

Number of employees

	Netherlands			International			Total		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Total average number of employees at full time equivalent basis	**13,600**	13,141	13,660	**38,633**	38,363	38,283	**52,233**	51,504	51,943

Remuneration of senior management, Management Board Banking and Supervisory Board

Reference is made to Note 48 'Related parties'.

Stock option and share plans

ING Bank 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 Management Board Banking, general managers and other officers nominated by the Management Board Banking), and to a considerable number of employees of ING Bank. The purpose of the option and share schemes, apart from promoting a lasting growth of ING Bank, is to attract, retain and motivate senior executives and staff.

ING grants three types of share awards, deferred shares, performance shares and upfront shares, which form part of the variable remuneration offering via the Long term Sustainably Performance

Plan (LSPP). The entitlement to the 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. In addition to the employment condition, the performance shares require a performance condition that needs to be satisfied before a vest can occur. The number of ING shares that would ultimately be vested at the end of a performance period is dependent on ING's performance over that period. Upfront and deferred shares awarded to the Management Board members of ING Bank 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 information presented below on stock options and share plans on ING Bank N.V. shares includes personnel employed by entities that are presented as continuing operations as well as held for sale and discontinued operations.

The shares granted in 2018 relate to performance year 2017. In 2018, 111,779 share awards (2017: 159,217; 2016: 232,281) were granted to the members of the Management Board Banking. To senior management and other employees 3,989,214 share awards (2017: 4,846,903; 2016: 6,590,039) 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, up and until 2010, will be run off in the coming years.

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)		
	2018	2017	2016	2018	2017	2016
Opening balance	9,572,737	15,838,152	22,939,049	12.46	15.53	17.52
Exercised	–475,650	–1,290,392	–929,529	6.02	6.05	6.20
Forfeited	–63,795	–97,188	–140,278	8.89	14.13	15.83
Expired	–5,741,964	–4,877,835	–6,031,090	16.82	24.09	24.54
Closing balance	**3,291,328**	**9,572,737**	**15,838,152**	**5.84**	12.46	15.53

The weighted average share price at the date of exercise for options exercised during 2018 is EUR 13.65 (2017: EUR 13.81; 2016: 10.43). 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	2018	2017	2016	2018	2017	2016	2018	2017	2016
0.00 – 5.00	1,130,907	1,342,436	1,771,080	0.21	1.21	2.21	2.87	2.87	2.87
5.00 – 10.00	2,160,421	2,496,862	3,401,679	1.21	2.21	3.21	7.39	7.39	7.38
10.00 – 15.00		75,399	97,258		0.71	1.71		14.35	14.35
15.00 – 20.00		5,658,040	5,973,986		0.21	1.21		16.94	16.93
20.00 – 25.00			4,247,605			0.23			24.58
25.00 – 30.00			346,544			0.38			25.42
	3,291,328	**9,572,737**	**15,838,152**						

All options outstanding are exercisable. As at 31 December 2018, the aggregate intrinsic value of options outstanding and exercisable is EUR 12 million (2017: EUR 37 million; 2016: EUR 39 million).

Changes in share awards

	Share awards (in numbers)			Weighted average grant date fair value (in euros)		
	2018	2017	2016	2018	2017	2016
Opening balance	7,220,642	8,362,851	8,648,781	11.46	10.44	10.07
Granted	4,100,993	5,006,120	6,822,320	12.50	13.20	10.20
Performance effect	341,623	379,805	542,749	11.65	10.47	8.68
Vested	–5,565,093	–6,309,714	–7,493,664	12.05	11.41	9.67
Forfeited	–245,179	–218,420	–157,335	11.38	10.83	10.50
Closing balance	**5,852,986**	**7,220,642**	**8,362,851**	11.62	11.46	10.44

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. As of 2016, ING Bank no longer has share awards containing a market based performance condition. Previously, the fair values of share awards containing a market based performance condition have been determined using a Monte Carlo simulation based valuation model. The model takes into account the risk free interest rate, the current stock prices, expected volatilities and current dividend yields of the performance peer group used to determine ING's Total Shareholder Return (TSR) ranking.

As at 31 December 2018, total unrecognised compensation costs related to share awards amount to EUR 29 million (2017: EUR 37 million; 2016: EUR 41 million). These costs are expected to be recognised over a weighted average period of 1.4 years (2017: 1.4 years; 2016: 1.4 years).

28 Other operating expenses

Other operating expenses

	2018	2017	2016
IT related expenses	779	737	740
Office expenses	564	586	580
Advertising and public relations	402	455	404
Travel and accommodation expenses	179	178	169
External advisory fees	357	350	319
Audit and non-audit services	26	22	19
Postal charges	54	50	48
Depreciation of property and equipment	312	319	330
Amortisation of intangible assets	209	179	187
Impairments and reversals on property and equipment and intangibles	19	18	107
Regulatory costs	947	901	845
Addition/(unused amounts reversed) of provision for reorganisations and relocations	4	–5	1,189
Addition/(unused amounts reversed) of other provisions	–13	167	213
Contributions and subscriptions	91	87	79
Other	1,336	554	338
	5,265	**4,598**	**5,567**

Other operating expenses include lease and sublease payments in respect of operating leases of EUR 268 million (2017: EUR 307 million; 2016: EUR 310 million) in which ING Bank is the lessee. No individual operating lease has terms and conditions that significantly affect the amount, timing and certainty of the consolidated cash flows of the Group.

Audit and non-audit services

Audit and non-audit services include fees for services provided by the Bank's auditors. Increase in audit fees 2018 primarily relates to audit activities for the implementation of IFRS 9 and IFRS 16.

Regulatory costs

Regulatory costs represent contributions to the Deposit Guarantee Schemes (DGS), The Single Resolution Fund (SRF) and local bank taxes. As of 1 January 2016, the new ex-ante DGS in the Netherlands and the SRF came into effect resulting in an increase of Regulatory costs. Included in Regulatory costs for 2018, are contributions to DGS of EUR 364 million (2017: EUR 341 million; 2016: EUR 316 million) mainly related to the Netherlands, Germany, Belgium, Poland, and Spain and contributions to the SRF of EUR 208 million (2017: EUR 179 million; 2016: EUR 176 million) related to the SRF. In 2018 local bank taxes decreased by EUR 6 million from EUR 381 million in 2017 to EUR 375 million (2016: EUR 351 million) due to a prior year adjustment (credit) on the UK bank tax of EUR 10 million.

Addition/(unused amounts reversed) of provision for reorganisations and relocations

For Addition/(unused amounts reversed) on provision for reorganisations and relocations, reference is made to the disclosure on the reorganisation provision in Note 16 'Provisions'.

Addition/(unused amounts reversed) of other provisions

Included in Addition/(unused amounts reversed) of other provisions in 2018, is a release for the provision recognised in relation of a discontinued business in ING Luxembourg. Reference is made to Note 16 'Provisions' and Note 44 'Legal proceedings'.

Tangible and Intangible impairments and reversals

Impairments and reversals of property and equipment and intangibles

	Impairment losses			Reversals of impairments			Total		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Property and equipment	9	10	65	–17	–24	–5	–8	–14	60
Property development	15	2	3				15	2	3
Software and other intangible assets	12	30	44				12	30	44
(Reversals of) other impairments	**35**	**42**	**112**	**–17**	**–24**	**–5**	**19**	**18**	**107**

Other

Other operating expenses - Other includes, amongst other, the settlement with the Dutch Authorities of EUR 775 million. 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 agreement ING has agreed to pay a fine of EUR 675 million and EUR 100 million for disgorgement. Reference is made to Note 44 ‘Legal proceedings’.

29 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		2018	2017	2016
Cash flows from operating activities				
Result before tax		6,751	7,404	5,937
Adjusted for:	– Depreciation and amortisation	520	520	536
	– Addition to loan loss provisions	656	676	974
	– Other	–1,646	708	1,580
Taxation paid		–1,600	–1,753	–1,555
Changes in:	– Loans and advances to banks, not available on demand	–778	–3,306	–1,168
	– Deposits from banks, not payable on demand	566	6,320	–346
	Net change in loans and advances to/ from banks, not available/ payable on demand	**–212**	**3,014**	**–1,514**
	– Trading assets	16,838	–1,605	16,976
	– Trading liabilities	–7,018	–9,575	–5,634
	Net change in Trading assets and Trading liabilities	**9,820**	**–11,180**	**11,342**
	Loans and advances to customers	–31,016	–21,397	–29,668
	Customer deposits	31,241	22,960	23,682
	– Non-trading derivatives	–270	–2,403	1,725
	– Assets designated at fair value through profit or loss	–725	441	–3,400
	– Assets mandatorily at fair value through profit or loss	–6,968	n/a	n/a
	– Other assets	418	–663	–1,280
	– Other financial liabilities at fair value through profit or loss	10,546	–566	–432
	– Provisions and other liabilities	621	854	1,030
	Other	**3,622**	**–2,337**	**–2,357**
Net cash flow from/(used in) operating activities		**18,136**	**–1,385**	**8,957**

30 Changes in liabilities arising from financing activities

Changes in liabilities arising from financing activities

	2017		Cash Flows			Non cash changes				2018
		Effect of change in accounting policy	Additions	Redemptions / Disposals	Aquisitions	Amor-tisation	Other	Changes in FV	Foreign exchange movement	
Debt securities in issue	90,231	702	141,214	–131,170		78		–247	1,350	102,159
Subordinated Loans	15,831	170	1,828	–4,594		4		37	367	13,643
Total Liabilities from financing activities	**106,062**	**872**	**143,042**	**–135,764**	**–**	**83**	**–**	**–210**	**1,717**	**115,802**
	2016									2017
Debt securities in issue	101,305		89,369	–95,077		132	–40	–866	–4,592	90,231
Subordinated Loans	16,104		2,314	–1,246		89		–274	–1,156	15,831
Total Liabilities from financing activities	**117,409**		**91,683**	**–96,323**	**–**	**221**	**–40**	**–1,140**	**–5,748**	**106,062**

31 Cash and cash equivalents

Cash and cash equivalents

	2018	2017	2016
Treasury bills and other eligible bills	159	391	512
Deposits from banks/Loans and advances to banks	–2,618	–3,404	–2,493
Cash and balances with central banks	49,987	21,989	18,122
Cash and cash equivalents at end of year	**47,528**	**18,976**	**16,163**

Treasury bills and other eligible bills included in cash and cash equivalents

	2018	2017	2016
Treasury bills and other eligible bills included in trading assets	17	5	126
Treasury bills and other eligible bills included in AFS investments	n/a	386	386
Treasury bills and other eligible bills included in FVOCI		n/a	n/a
Treasury bills and other eligible bills included in securities at AC	142	n/a	n/a
	159	**391**	**512**

Deposits from banks/Loans and advances to banks

	2018	2017	2016
Included in cash and cash equivalents:			
– Deposits from banks	–8,520	–8,563	–9,809
– Loans and advances to banks	5,902	5,159	7,316
	–2,618	**–3,404**	**–2,493**
Not included in cash and cash equivalents:			
– Deposits from banks	–28,811	–28,258	–22,155
– Loans and advances to banks	24,519	23,587	21,556
	–4,292	**–4,671**	**–599**
Total as included in the statement of financial position:			
– Deposits from banks	–37,330	–36,821	–31,964
– Loans and advances to banks	30,420	28,746	28,872
	–6,910	**–8,075**	**–3,092**

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 40 'Assets not freely disposable' for restrictions on Cash and balances with central banks.

ING Bank's risk management (including liquidity) is explained in note 50 'Risk management – Funding and liquidity risk'.

Segment reporting

32 Segments

ING Bank's segments are based on the internal reporting structures by lines of business.

The Management Board Banking of ING Bank set the performance targets, approve and monitor the budgets prepared by the business lines. Business lines formulate strategic, commercial, and financial policy in conformity with the strategy and performance targets set by the Management Board Banking of ING Bank.

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 *(Market Leaders)*	Income from retail and private banking activities in the Netherlands, including the SME and mid-corporate segments. The main products offered are current and savings accounts, business lending, mortgages and other consumer lending in the Netherlands.
Retail Belgium *(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 *(Challengers and 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 *(Challengers and 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 (a full range of products is offered from cash management to corporate finance), real estate and lease.

The geographical segments for the Banking results are presented on page 117.

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 run-off portfolio
Growth Markets	Poland, Romania, Turkey 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 Bank 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 Bank at a consolidated level and by segment. The Management Board Banking consider this measure to be relevant to an understanding of the Bank's financial performance, because it allows investors to understand the primary method used by management to evaluate the Bank's operating performance and make decisions about allocating resources. In addition, ING Bank 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 and the impact of divestments.

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.

ING Bank 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 expenses that are not allocated to the banking businesses. 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 Bank 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 Management Board Banking of ING Bank.

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.

Reconciliation between IFRS and Underlying income, expenses and net result

	2018					2017					2016				
2018	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	18,102	11,351	2,036	108	4,607	17,876	10,472	2,303	82	5,019	17,514	11,577	1,635	75	4,227
Remove impact of:															
Special items [2]		–775			775	–121		–121		0		–1,157	358		799
Underlying [3]	**18,102**	**10,576**	**2,036**	**108**	**5,382**	**17,755**	**10,472**	**2,182**	**82**	**5,019**	**17,514**	**10,419**	**1,993**	**75**	**5,026**

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 2017-2013, for which a full reimbursement is expected to be received from NN Bank.
Special items in 2016 primarily comprise restructuring charges and impairments related to the intended digital transformation programmes as announced in October 2016.
3 Underlying figures are derived from figures according to IFRS by excluding the impact from special items.

Segments Banking by line of business

2018

	Retail Netherlands	Retail Belgium	Retail Germany	Retail Other	Wholesale Banking	Corporate Line Banking	Total Banking
Underlying income							
– Net interest income	3,488	1,830	1,671	2,690	3,947	324	13,949
– Net fee and commision income	654	371	225	395	1,161	–3	2,803
– Total investment and other income	335	169	76	230	673	–133	1,350
Total underlying income	**4,476**	**2,369**	**1,972**	**3,315**	**5,781**	**188**	**18,102**
Underlying expenditure							
– Operating expenses	2,165	1,610	1,027	2,033	2,826	260	9,920
– Additions to loan loss provision	–31	164	–27	350	200	–1	656
Total underlying expenses	**2,134**	**1,774**	**1,000**	**2,383**	**3,026**	**258**	**10,576**
Underlying result before taxation	**2,342**	**595**	**972**	**932**	**2,755**	**–70**	**7,526**
Taxation	578	199	324	200	681	55	2,036
Non-controlling interests	–0	6	3	80	19	–0	108
Underlying net result	**1,764**	**390**	**646**	**652**	**2,055**	**–125**	**5,382**
Special items						–775	–775
Net result IFRS	**1,764**	**390**	**646**	**652**	**2,055**	**–900**	**4,607**

2017

	Retail Netherlands	Retail Belgium	Retail Germany	Retail Other	Wholesale Banking	Corporate Line Banking	Total Banking
Underlying income							
– Net interest income	3,610	1,842	1,704	2,437	3,895	294	13,782
– Net fee and commision income	601	408	215	384	1,108	–3	2,714
– Total investment and other income	257	224	–28	207	919	–318	1,259
Total underlying income	**4,468**	**2,473**	**1,891**	**3,028**	**5,922**	**–27**	**17,755**
Underlying expenditure							
– Operating expenses	2,212	1,584	1,032	1,919	2,792	257	9,795
– Additions to loan loss provision	13	104	–10	284	284	1	676
Total underlying expenses	**2,224**	**1,688**	**1,022**	**2,203**	**3,076**	**258**	**10,472**
Underlying result before taxation	**2,243**	**785**	**869**	**825**	**2,846**	**–285**	**7,283**
Taxation	566	296	241	188	881	9	2,182
Non-controlling interests		–2	2	67	15		82
Underlying net result	**1,678**	**491**	**625**	**569**	**1,950**	**–293**	**5,019**
Special items						0	0
Net result IFRS	**1,678**	**491**	**625**	**569**	**1,950**	**–293**	**5,019**

2016

	Retail Netherlands	Retail Belgium	Retail Germany	Retail Other	Wholesale Banking	Corporate Line Banking	Total Banking
Underlying income							
– Net interest income	3,653	1,936	1,689	2,107	3,750	182	13,317
– Net fee and commision income	546	385	183	320	1,003	–2	2,434
– Total investment and other income	237	253	51	432	855	–65	1,763
Total underlying income	**4,463**	**2,573**	**1,923**	**2,859**	**5,608**	**115**	**17,514**
Underlying expenditure							
– Operating expenses	2,560	1,438	886	1,723	2,572	267	9,445
– Additions to loan loss provision	171	175	–18	278	368		974
Total underlying expenses	**2,731**	**1,613**	**868**	**2,001**	**2,940**	**267**	**10,419**
Underlying result before taxation	**1,705**	**961**	**1,055**	**858**	**2,668**	**–152**	**7,095**
Taxation	422	306	315	178	753	18	1,993
Non-controlling interests		1	2	60	11		75
Underlying net result	**1,282**	**653**	**738**	**620**	**1,903**	**–171**	**5,026**
Special items	–192	–418		–12	–149	–27	–799
Net result IFRS	**1,090**	**235**	**738**	**608**	**1,754**	**–198**	**4,227**

Geographical segments Banking

2018

	Nether-lands	Belgium	Germany	Other Challengers	Growth markets	Wholesale Banking rest of the world	Other	Total Banking
Underlying income								
– Net interest income	4,374	2,129	2,200	1,732	1,639	1,556	319	13,949
– Net fee and commission income	980	519	273	254	297	483	–4	2,803
– Total investment and other income	509	379	99	–92	333	245	–123	1,350
Total underlying income	**5,863**	**3,028**	**2,572**	**1,895**	**2,269**	**2,283**	**192**	**18,102**
Underlying expenditure								
– Operating expenses	2,929	1,927	1,171	1,217	1,175	1,226	276	9,920
– Additions to loan loss provision	–65	153	6	163	274	126	–1	656
Total underlying expenses	**2,863**	**2,080**	**1,176**	**1,380**	**1,449**	**1,353**	**275**	**10,576**
Underlying result before taxation	**3,000**	**948**	**1,396**	**515**	**820**	**931**	**–83**	**7,526**
Taxation	741	291	459	178	143	174	52	2,036
Non-controlling interests	1	6	3		98		–0	108
Underlying net result	**2,258**	**651**	**935**	**337**	**580**	**757**	**–134**	**5,382**
Special items							–775	–775
Net result IFRS	**2,258**	**651**	**935**	**337**	**580**	**757**	**–909**	**4,607**

2017

	Nether-lands	Belgium	Germany	Other Challengers	Growth markets	Wholesale Banking rest of the world	Other	Total Banking
Underlying income								
– Net interest income	4,537	2,099	2,172	1,527	1,515	1,636	295	13,782
– Net fee and commission income	871	519	269	232	316	509	–3	2,714
– Total investment and other income	445	480	–17	22	296	245	–211	1,259
Total underlying income	**5,853**	**3,098**	**2,424**	**1,781**	**2,127**	**2,390**	**82**	**17,755**
Underlying expenditure								
– Operating expenses	2,930	2,063	1,154	1,142	1,126	1,113	267	9,795
– Additions to loan loss provision	3	160	–15	201	241	85	1	676
Total underlying expenses	**2,933**	**2,223**	**1,140**	**1,344**	**1,367**	**1,198**	**268**	**10,472**
Underlying result before taxation	**2,920**	**876**	**1,285**	**437**	**760**	**1,192**	**–186**	**7,283**
Taxation	708	369	407	145	151	379	21	2,182
Non-controlling interests		–2	2		82			82
Underlying net result	**2,212**	**508**	**875**	**292**	**527**	**813**	**–207**	**5,019**
Special items							0	0
Net result IFRS	**2,212**	**508**	**875**	**292**	**527**	**813**	**–207**	**5,019**

2016

	Nether-lands	Belgium	Germany	Other Challengers	Growth markets	Wholesale Banking rest of the world	Other	Total Banking
Underlying income								
– Net interest income	4,699	2,183	2,025	1,373	1,274	1,579	183	13,317
– Net fee and commission income	779	482	241	171	309	452	–1	2,434
– Total investment and other income	367	559	75	133	460	202	–33	1,763
Total underlying income	**5,845**	**3,225**	**2,340**	**1,677**	**2,043**	**2,233**	**149**	**17,514**
Underlying expenditure								
– Operating expenses	3,301	1,796	987	951	1,103	1,029	279	9,445
– Additions to loan loss provision	310	215	–13	120	240	103	–	974
Total underlying expenses	**3,610**	**2,010**	**973**	**1,071**	**1,343**	**1,132**	**279**	**10,419**
Underlying result before taxation	**2,235**	**1,215**	**1,367**	**607**	**700**	**1,101**	**–130**	**7,095**
Taxation	555	353	426	173	125	335	27	1,993
Non-controlling interests		1	2		71			75
Underlying net result	**1,680**	**860**	**939**	**433**	**504**	**766**	**–157**	**5,026**
Special items	–268	–491		–13			–27	–799
Net result IFRS	**1,412**	**369**	**939**	**420**	**504**	**766**	**–184**	**4,227**

33 Information on geographical areas

ING Bank'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 Bank 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 Bank's country of domicile.

The tables below provide additional information, for the years 2018, 2017 and 2016 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		
				2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
The Netherlands	Netherlands	ING Bank N.V.	Wholesale / Retail	13,600	13,141	13,660	5,837	5,860	5,790	261,449	241,481	293,893	1,673	2,437	1,375	634	661	360
Belgium	Belgium	ING België N.V.	Wholesale / Retail	8,248	8,893	9,348	2,807	2,957	3,154	120,589	119,400	131,431	866	1,009	554	275	408	143
	Luxemburg	ING Luxembourg S.A.	Wholesale / Retail	791	777	793	315	298	274	13,313	14,748	10,783	198	68	138	50	27	32
Rest of Europe	Poland	ING Bank Slaski S.A	Wholesale / Retail	8,829	8,664	8,735	1,229	1,119	992	33,040	29,976	26,581	525	444	379	128	112	90
	Germany	ING DiBa A.G.	Wholesale / Retail	4,625	4,587	4,341	2,421	2,312	2,212	144,911	138,153	134,902	1,309	1,240	1,282	431	396	407
	Romania	Branch of ING Bank N.V.	Wholesale / Retail	2,269	1,968	1,806	403	314	288	7,112	5,940	5,456	183	135	123	25	23	21
	Spain	Branch of ING Bank N.V.	Wholesale / Retail	1,201	1,135	1,116	600	509	498	23,757	23,858	23,309	195	97	197	71	25	51
	Italy	Branch of ING Bank N.V.	Wholesale / Retail	911	838	833	231	336	376	16,991	16,728	15,920	–101	–4	100	–24	7	33
	UK	Branch of ING Bank N.V.	Wholesale	672	603	599	505	550	504	64,016	78,573	29,830	180	324	290	44	76	154
	France[1]	Branch of ING Bank N.V.	Wholesale / Retail	620	591	613	323	310	280	12,063	10,678	8,614	111	93	56	45	32	18
	Russia	ING Bank (Eurasia) Z.A.O.	Wholesale	277	270	276	82	136	118	1,449	1,607	2,008	25	78	69	3	20	7
	Czech Republic	Branch of ING Bank N.V.	Wholesale / Retail	306	245	220	104	66	74	6,272	5,641	3,653	37	16	37	9	3	7
	Hungary	Branch of ING Bank N.V.	Wholesale	141	146	152	40	32	37	1,227	1,003	1,358	5		–1	3	2	3
	Slovakia	Branch of ING Bank N.V.	Wholesale	571	497	400	14	14	14	487	677	715		2	3	1	1	1
	Ukraine	PJSC ING Bank Ukraine	Wholesale	109	106	111	36	30	59	368	321	622	22	9	47	3	2	7
	Austria	Branch of ING DiBa A.G.	Wholesale / Retail	235	225	196	85	80	86	753	682	360	18	25	37	6	–1	–4
	Bulgaria	Branch of ING Bank N.V.	Wholesale	69	70	76	9	9	9	360	268	274		–2				
	Ireland	Branch of ING Bank N.V.	Wholesale	47	43	42	69	57	53	2,867	2,337	1,910	59	48	54	7	6	7
	Portugal	Branch of ING Bank N.V.	Wholesale	11	11	11	18	14	14	905	667	642	13	9	10	4	3	3
	Switzerland	Branch of ING België N.V.	Wholesale	244	204	192	257	224	187	8,266	9,737	9,150	169	145	122	35	38	33

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		
				2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
North America	Canada	Payvision Canada Services Ltd.	Wholesale	1			3			2	2	1						
	USA	ING Financial Holdings Corp.	Wholesale	617	564	519	736	724	732	61,440	42,873	42,571	343	371	377	61	134	110
Latin America	Brazil	Branch of ING Bank N.V.	Wholesale	88	78	70	35	47	43	1,974	1,184	2,097	16	16	13	9	4	
	Colombia	ING Capital Colombia S.A.S.	Wholesale	3	2	2	1	1		2	2	1						
	Mexico	ING Consulting, S.A. de C.V.	Wholesale	8	8	7	1	1	1	2	2	2	–2	–2	–1			
Asia	China	Branch of ING Bank N.V.	Wholesale	86	81	72	37	35	36	2,107	2,298	2,049	3	7	7	7	–2	–2
	Japan	Branch of ING Bank N.V.	Wholesale	32	35	33	36	33	36	2,300	2,238	3,702	19	17	22	5	11	9
	Singapore	Branch of ING Bank N.V.	Wholesale	546	512	502	340	297	194	32,222	25,803	25,780	176	133	22	21	9	5
	Macau	Payvision Macau Ltd.	Wholesale		n/a	n/a		n/a	n/a		n/a	n/a		n/a	n/a		n/a	n/a
	Hong Kong	Branch of ING Bank N.V.	Wholesale	122	108	106	110	94	80	6,975	7,850	5,964	52	55	40	8	7	7
	Philippines	Branch of ING Bank N.V.	Wholesale	878	604	423	17	18	17	395	322	402		6	4	3	2	–2
	South Korea	Branch of ING Bank N.V.	Wholesale	80	82	87	55	55	46	4,299	4,602	4,107	14	21	14	3	6	–1
	Taiwan	Branch of ING Bank N.V.	Wholesale	33	33	32	23	23	15	2,839	3,910	2,484	7	11	3			1
	Indonesia	PT ING Securities Indonesia	Wholesale	3	5	5		1	1	6	6	7						
	Malaysia	Branch of ING Bank N.V.	Wholesale	5	5	5	1			139	29	3		–1				
	India	Branch of ING Bank N.V.	Wholesale					1		1	2	2		1				
	Turkey	ING Bank A.S.	Wholesale / Retail	4,709	5,221	5,497	678	741	757	11,521	13,798	15,864	245	267	225	50	54	45
	United Arabic	Branch of ING Bank N.V.	Wholesale	11	10	10						1	–1	–2	–2			
Australia	Australia	ING Bank (Australia) Ltd.	Wholesale / Retail	1,234	1,143	1,053	647	577	505	39,673	37,982	36,691	389	330	309	118	235	90
Other	Mauritius	ING Mauritius Ltd.	Investment				1	1	32	920	939	780	1		32			
Total				**52,233**	**51,504**	**51,943**	**18,102**	**17,876**	**17,514**	**887,012**	**846,318**	**843,919**	**6,751**	**7,404**	**5,937**	**2,036**	**2,303**	**1,635**

1 Public subsidies received, as defined in article 89 of the CRD IV, amounts to EUR 0.5 million (2017: EUR 0.5 million; 2016: EUR 1 million).

2018
The relatively high tax charge in the Netherlands is caused by non-deductible expenses based 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.

2016
The UK has a high tax charge due to changes in tax law and prior year adjustments. Russia, China, Philippines and South Korea all have lower tax charges due to prior year adjustments.
Austria has an inverse tax charge due to the recognition of a tax asset for previously unrecognised tax losses.
Brazil has a low tax charge due to the combination of relatively high exempt income with a decreased profit.
Mauritius has no tax charge as the partial sale of Kotak Mahindra Bank shares in September 2016 was tax exempt.

Additional notes to the Consolidated annual accounts

34 Pension and other post-employment benefits

Most group companies sponsor defined contribution pension plans. The assets of all ING Bank'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 dependant 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 Bank 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 Bank 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	
	2018	2017	2018	2017	2018	2017
The Netherlands	394	408	540	568	–146	–160
United States	222	176	224	233	–3	–57
United Kingdom	1,703	1,864	1,179	1,326	524	538
Belgium	547	597	636	672	–88	–75
Other countries	154	161	334	341	–181	–180
Funded status (Net defined benefit asset/liability)	**3,019**	**3,206**	**2,913**	**3,140**	**106**	**66**
Presented as:						
– Other assets					527	542
– Other liabilities					–421	–476
					106	**66**

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 2018. 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

	2018	2017
Opening balance	3,206	3,337
Interest income	66	70
Remeasurements: Return on plan assets excluding amounts included in interest income	–143	52
Employer's contribution	66	24
Participants contributions	3	2
Benefits paid	–176	–186
Exchange rate differences	–3	–93
Closing balance	**3,019**	**3,206**
Actual return on the plan assets	**–77**	**122**

As at 31 December 2018 the various defined benefit plans did not hold any direct investments in ING Bank N.V. (2017: nil). During 2018 and 2017 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, however for some funds ING does provide administration services for which ING receives fees. 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 Bank during 2019.

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	
	2018	2017	2018	2017
Opening balance	3,140	3,249	87	87
Current service cost	39	34	–4	–3
Interest cost	61	66	2	3
Remeasurements: Actuarial gains and losses arising from changes in demographic assumptions	2	–7		9
Remeasurements: Actuarial gains and losses arising from changes in financial assumptions	–153	71	–11	
Participants' contributions	3	2	1	
Benefits paid	–179	–189	–1	–1
Effect of curtailment or settlement		–3		
Exchange rate differences	2	–83	2	–8
Changes in the composition of the group and other changes	–1			
Closing balance	**2,913**	**3,140**	**76**	**87**

Amounts recognised directly in Other comprehensive income (equity) were as follows:

Changes in the net defined benefit assets/liability remeasurement reserve

	2018	2017
Opening balance	–400	–371
Remeasurement of plan assets	–143	52
Actuarial gains and losses arising from changes in demographic assumptions	–2	7
Actuarial gains and losses arising from changes in financial assumptions	153	–71
Taxation	–3	–17
Total Other comprehensive income movement for the year	**6**	**–29**
Closing balance	**–394**	**–400**

In 2018, EUR -143 million Remeasurement of plan assets and EUR 153 million Actuarial gains and losses arising from changes in financial assumptions are mainly due to an increase in discount rates.

The accumulated amount of remeasurements recognised directly in Other comprehensive income (equity) is EUR -453 million (EUR -394 million after tax) as at 31 December 2018 (2017: EUR -476 million, EUR -400 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		
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
Current service cost	39	34	32	–4	–3	–25	22	–2	11	57	29	18
Past service cost			2									2
Net Interest cost	–4	–4	–8	2	3	3		1	2	–2		–3
Effect of curtailment or settlement		–3	–2				–1			–1	–3	–2
Defined benefit plans	**35**	**27**	**24**	**–1**	**-**	**–22**	**21**	**–1**	**13**	**54**	**26**	**15**
Defined contribution plans										331	355	329
										385	**381**	**344**

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 Bank 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 2018 was 2.3% (2.0% in 2017) 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 3.9% (3.2% in 2017).

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 a financial impact of EUR -415 million and EUR 534 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 Bank's subsidiaries should fund the cost of the entitlements expected to be earned on a yearly basis.

For 2019 the expected contributions to pension plans are EUR 36 million.

The benefit payments for defined benefit and other post-employment benefits expected to be made by the plan between 2019-2023 are estimated to be between EUR 94 million and EUR 125 million per annum. From 2024 to 2028 the total payments made by the plan are expected to be EUR 661 million.

35 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 Bank is subject to taxation.

Changes in deferred tax

2018	Net liability (-) Net asset (+) 2017	Effect of changes in accountin g policies[2]	Change through equity	Change through net result	Exchange rate difference s	Changes in the compo-sition of the group and other changes	Net liability (-) Net asset (+) 2018
Financial assets at FVOCI[1]	–555	142	76	273	4	–2	–64
Investment properties	–5			–1			–6
Financial assets and liabilities at FVPL	419	16		–338	17	1	116
Depreciation	–24			1			–23
Cash flow hedges	–72		–76		7	1	–140
Pension and post-employment benefits	76		–12	–8	2		59
Other provisions	198	4		–187	–7	1	10
Receivables	614			–59	1		556
Loans and advances to customers	–394	137	35	24	–1	2	–198
Unused tax losses carried forward	–8			60	–2		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 Financial assets FVOCI refers to the Investments Available for Sale under IAS 39.
2 Effect of changes in accounting policies refers to IFRS 9 implementation (reference is made to Note 1 'Accounting policies - Reconciliation of carrying amounts on the date of initial application IFRS 9').

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.

Changes in deferred tax

2017	Net liability (-) Net asset (+) 2016	Change through equity	Change through net result	Exchange rate differences	Changes in the composition of the group and other changes	Net liability (-) Net asset (+) 2017
Investments	–799	123	116	5		–555
Investment properties	–5					–5
Financial assets and liabilities at fair value through profit or loss	697		–290	12		419
Depreciation	–33		5	4		–24
Cash flow hedges	–238	167		–1		–72
Pension and post-employment benefits	112	–25	–6	–5		76
Other provisions	255		–48	–6	–3	198
Receivables	570		49	–5		614
Loans and advances to customers	–409	–2	17			–394
Unused tax losses carried forward	57		–60	–5		–8
Other	–126	–10	–49	2		–183
	81	**253**	**–266**	**1**	**–3**	**66**
Presented in the statement of financial position as:						
– Deferred tax liabilities	–919					–752
– Deferred tax assets	1,000					818
	81					**66**

Deferred tax in connection with unused tax losses carried forward

	2018	2017
Total unused tax losses carried forward	1,771	1,732
Unused tax losses carried forward not recognised as a deferred tax asset	1,010	1,074
Unused tax losses carried forward recognised as a deferred tax asset	**761**	**658**
Average tax rate	20.5%	19.5%
Deferred tax asset	156	128

Total unused tax losses carried forward analysed by expiry terms

	No deferred tax asset recognised		Deferred tax asset recognised	
	2018	2017	2018	2017
Within 1 year	1	2		
More than 1 year but less than 5 years	2	350	2	38
More than 5 years but less than 10 years	83	31	1	
More than 10 years but less than 20 years		18		
Unlimited	923	673	758	620
	1,010	**1,074**	**761**	**658**

The above mentioned deferred tax of EUR 156 million (2017: EUR 128 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 –105 million (2017: EUR –136 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

	2018	2017
Italy	189	107

The table above includes a breakdown of certain net deferred tax asset positions by jurisdiction for which the utilisation is dependent on future taxable profits 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.

Statement of profit or loss – Taxation

Taxation by type

	Netherlands			International			Total		
	2018	2017	2016	2018	2017	2016	2018	2017	2016
Current taxation	597	510	167	1,263	1,527	1,375	1,861	2,037	1,542
Deferred taxation	37	151	193	139	115	–100	175	266	93
	634	**661**	**360**	**1,402**	**1,642**	**1,275**	**2,036**	**2,303**	**1,635**

Reconciliation of the weighted average statutory income tax rate to ING Bank's effective income tax rate

	2018	2017	2016
Result before tax from continuing operations	6,751	7,404	5,937
Weighted average statutory tax rate	25.9%	27.0%	27.5%
Weighted average statutory tax amount	**1,751**	**2,002**	**1,630**
Participation exemption	–77	–45	–61
Other income not subject to tax	–40	–84	–111
Expenses not deductible for tax purposes	346	155	129
Impact on deferred tax from change in tax rates	–8	55	–1
Deferred tax benefit from previously unrecognised amounts		–4	–18
Current tax from previously unrecognised amounts	28	66	–22
Write-off/reversal of deferred tax assets	4	2	33
State and local taxes	25	47	33
Adjustment to prior periods	7	109	23
Effective tax amount	**2,036**	**2,303**	**1,635**
Effective tax rate	**30.2%**	**31.1%**	**27.6%**

The weighted average statutory tax rate in 2018 is lower compared to 2017. This is mainly due to lower statutory income tax rates in the USA and Belgium.

The effective tax rate of 30.2% 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 settlement agreement reached with the Dutch authorities on regulatory issues (tax amount: EUR 194 million).

The weighted average statutory tax rate in 2017 does not significantly differ compared to 2016. The effective tax rate in 2017 was 31.1%.

The effective tax rate in 2017 was 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 expected to be reimbursed by NN Group (reimbursement is included in the result before tax), recorded under 'Adjustment to prior periods';
- Impact on deferred tax positions following changes in the income tax rate in the USA and Belgium, recorded 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, recorded under 'Current tax from previously unrecognised amounts'.

The effective tax rate in 2016 is almost equal to the weighted average statutory tax rate. This is mainly caused by the fact that the non-taxable income and the recognition of tax benefits from previously unrecognised amounts are almost fully offset by non-deductible expenses, and the write-off of deferred tax assets and the adjustments to prior periods.

Equity – Other comprehensive income

Income tax related to components of other comprehensive income

	2018	2017	2016
Unrealised revaluations financial assets at fair value through other comprehensive income and other revaluations	53	103	17
Realised gains/losses transferred to the statement of profit or loss (reclassifications from equity to profit or loss)	23	20	57
Changes in cash flow hedge reserve	–76	167	–48
Remeasurement of the net defined benefit asset/liability	–12	–25	–20
Changes in fair value of own credit risk of financial liabilities at fair value through profit or loss			
Exchange rate differences and other			–1
Changes in composition of the group and other changes	–18	–12	
Total income tax related to components of other comprehensive income	**–29**	**253**	**5**

Tax Contingency

The contingent liability 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.

36 Fair value of assets and liabilities

a) Financial assets and liabilities

The following table presents the estimated fair values of ING Bank'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 Bank.

Fair value of financial assets and liabilities

	Estimated fair value		Statement of financial position value	
	2018[3]	2017	2018	2017
Financial assets				
Cash and balances with central banks	49,987	21,989	49,987	21,989
Loans and advances to banks	30,548	28,846	30,420	28,746
Financial assets at fair value through profit or loss				
– Trading assets	50,163	116,763	50,163	116,763
– Non-trading derivatives	2,672	2,185	2,672	2,185
– Assets mandatorily as at fair value through profit or loss	64,783	n/a	64,783	n/a
– Assets designated as at fair value through profit or loss	2,887	4,242	2,887	4,242
Investments				
- Available-for-sale	n/a	69,730	n/a	69,730
- held to maturity	n/a	9,378	n/a	9,343
Financial assets at fair value through other comprehensive income				
– Equity securities	3,228	n/a	3,228	n/a
– Debt securities	25,616	n/a	25,616	n/a
– Loans and advances	2,379	n/a	2,379	n/a
Securities at amortised cost	47,815	n/a	47,276	n/a
Loans and advances to customers[4]	602,959	587,842	592,328	574,899
Other assets[1]	7,389	11,719	7,389	11,719
	890,427	**852,694**	**879,129**	**839,616**
Financial liabilities				
Deposits from banks	37,631	36,868	37,330	36,821
Customer deposits	580,404	553,546	580,294	552,690
Financial liabilities at fair value through profit or loss				
– Trading liabilities	31,215	73,596	31,215	73,596
– Non-trading derivatives	2,313	2,346	2,313	2,346
– Designated as at fair value through profit or loss	59,179	11,215	59,179	11,215
Other liabilities[2]	12,011	14,419	12,011	1,419
Debt securities in issue	102,207	90,614	102,159	90,231
Subordinated loans	13,872	16,391	13,643	15,831
	838,832	**798,995**	**838,144**	**797,149**

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 ,and other taxation and social security contributions.

3 The 2018 presentation was prospectively changed together with other IFRS9 changes and includes the reclassification of accrued interest from other assets and other liabilities to the corresponding balance sheet item of the host contract.

4 In 2018, the fair value of the loans and advances to customers as at 31 December 2017 is adjusted by the amount of the accrued interest (EUR 1,522 million). In 2017 the fair value of the accrued interest was reported, separate from loans and advances to customers, under other assets.

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, it measures 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.
- Exeptional 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 Bank 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 directly, 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. The technique for calculating CVA is based on Monte Carlo simulation and uses various input including counterparty credit spread, market interest rates, and market exchanges rates. The counterparty credit spreads are based on counterparty CDS spread where available. Otherwise, the indexed proxy CDS spreads are used.

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 Bank 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 Bank'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 Bank 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 Bank 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 Bank 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	
	2018	2017	2018	2017	2018	2017	2018	2017
Financial Assets								
Financial assets at fair value through profit or loss								
- Trading assets	13,052	20,128	36,617	95,530	494	1,105	50,163	116,763
- Non-trading derivatives			2,645	2,155	27	30	2,672	2,185
- Assets mandatorily at fair value through profit or loss	141	n/a	63,601	n/a	1,042	n/a	64,783	n/a
- Assets designated as at fair value through profit or loss	147	319	1,665	3,558	1,075	365	2,887	4,242
Available-for-sale investments	n/a	65,310	n/a	3,940	n/a	480	n/a	69,730
Financial assets at fair value through other comprehensive income	27,218	n/a	1,256	n/a	2,749	n/a	31,223	n/a
	40,558	**85,757**	**105,783**	**105,183**	**5,387**	**1,980**	**151,728**	**192,920**
Financial liabilities								
Financial liabilities at fair value through profit or loss								
- Trading liabilities	5,706	5,770	25,387	66,753	122	1,073	31,215	73,596
- Non-trading derivatives			2,232	2,278	80	68	2,313	2,346
- Financial liabilities designated as at fair value through profit or loss	894	1,186	57,577	9,928	708	101	59,179	11,215
	6,600	**6,956**	**85,196**	**78,959**	**910**	**1,242**	**92,707**	**87,157**

Financial assets carried at fair value decreased compared to 31 December 2017 mainly as a result of the reclassification of EUR 34,980 million available-for-sale debt securities to amortised cost due to the transition to IFRS 9.

In 2018, the increase in Level 2 financial assets and liabilities is mainly due to increased (reverse) repurchase balances.

There were no significant transfers between Level 1 and Level 2.

In 2018, there were no changes in the 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	AFS investments	Total	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Opening balance	1,104	1,223	30	62		n/a	365	456	480	521	1,980	2,262
Effect of changes in accounting policy					1,653		–1		3,446		5,097	
Realised gain/loss recognised in the statement of profit or loss during the period[1,3]	–54	–231	–4	–9	10		–20	4	1		–67	–236
Revaluation recognised in other comprehensive income during the period[2]									–131	–5	–131	–5
Purchase of assets	359	610	2		1,154		731	225	85	62	2,331	897
Sale of assets	–120	–326			–1,677			–1	–5	–43	–1,803	–370
Maturity/settlement	–42	–141			–78			–	–882	–24	–1,002	–165
Reclassifications									2	7	2	7
Transfers into Level 3	85	9									85	9
Transfers out of Level 3	–839	–37		–23	–37			–319	–249	–13	–1,125	–392
Exchange rate differences		–2			17				3	–24	20	–26
Changes in the composition of the group and other changes									–1	–1	–1	–1
Closing balance	**494**	**1,105**	**27**	**30**	**1,042**	**n/a**	**1,075**	**365**	**2,749**	**480**	**5,387**	**1,980**

1 Net gains/losses were recorded in income from trading activities in continuing operations herein as 'Valuation results and net trading income' in the statement of profit or loss. The total amounts includes EUR -5 million of unrealised gains on losses recognised in the statement of profit or loss.

2 Revaluation recognised in other comprehensive income is included on the line 'Unrealised revaluations Available-for-sale investements and other revaluations'.

3 'Revaluation recognised in equity during the year' has been renamed to 'Revaluation recognised in other comprehensive income during the period'.

In 2018, financial assets 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.

In 2017, financial assets were transferred out of Level 3 on the basis that the valuation is not significantly impacted by unobservable inputs.

Changes in Level 3 Financial liabilities

	Trading liabilities		Non-trading derivatives		Financial liabilities designated as at fair value through profit or loss		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Opening balance	1,073	1,378	68	24	101	123	1,242	1,525
Effect of changes in accounting policy			4		0		4	
Realised gain/loss recognised in the statement of profit or loss during the period[1]	–67	–105	8	44	1	–6	–58	–67
Issue of liabilities	42	485			545	14	587	500
Early repayment of liabilities	–87	–399			–20	–21	–106	–421
Maturity/settlement	–37	–187			–11		–49	–187
Transfers into Level 3	39	16			92		131	16
Transfers out of Level 3	–844	–111				–9	–844	–120
Exchange rate differences		–4			–0			–4
Changes in the composition of the group and other changes	2						2	
Closing balance	**122**	**1,073**	**80**	**68**	**708**	**101**	**910**	**1,242**

1 Net gains/losses were recorded in income from trading activities in continuing operations included herein as 'Valuation results and net trading income' in the statement of profit or loss. The total amount includes EUR -58 million of unrealised gains and losses recognised in the statement of profit or loss.

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.

In 2018 and 2017, financial liabilities were transferred out of Level 3 mainly due to the valuation not being significantly impacted by unobservable inputs.

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'statement of profit or loss.

Unrealised gains and losses that relate to 'Financial assets at fair value through other comprehensive income' (2018) and Available-for-sale investments (2017) recognised in Other comprehensive income 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 (2018) respectively Available-for-sale reserve and other (2017).

Level 3 Financial assets and liabilities

Financial assets measured at fair value in the statement of financial position as at 31 December 2018 of EUR 152 billion includes an amount of EUR 5.4 billion (3.6%) which is classified as Level 3 (31 December 2017: EUR 2.0 billion, being 1.0%). Changes in Level 3 from 31 December 2017 to 31 December 2018 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 2018 of EUR 93 billion includes an amount of EUR 0.9 billion (1.0%) which is classified as Level 3 (31 December 2017: EUR 1.2 billion, being 1.4%). Changes in Level 3 from 31 December 2017 to 31 December 2018 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 2018 of EUR 5.4 billion (31 December 2017: EUR 2.0 billion), an amount of EUR 3.4 billion (63.2%) (31 December 2017: EUR 1.0 billion, being 51.0%) 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 assets includes approximately EUR 1.1 billion (31 December 2017: EUR 0.4 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 0.8 billion (31 December 2017: EUR 0.6 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 2018 of EUR 0.9 billion (31 December 2017: EUR 1.2 billion), an amount of EUR 0.7 billion (82.0%) (31 December 2017: EUR 0.8 billion, being 66.0%) 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 2017: 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 0.1 billion (31 December 2017: EUR 0.3 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	
	2018	2017	2018	2017			2018	2017	2018	2017
At fair value through profit or loss										
Debt securities	807	386	3		Price based	Price (%)	0%	0%	105%	161%
					Net asset value	Price (%)	0%	0%	0%	0%
					Present value techniques	Credit spread (bps)	131	n/a	131	n/a
					Loan pricing model	Credit spread (bps)	n/a	n/a	n/a	n/a
Equity securities	162	4		1	Price based	Price	–	1	5,475	54
Loans and advances	1,047	20	15		Price based	Price (%)	1%	0%	102%	101%
					Present value techniques	Price (%)	100%	n/a	100%	n/a
						Credit spread (bps)	19	n/a	550	n/a
(Reverse) repo's	481		424		Present value techniques	Price (%)	3%	n/a	4%	n/a
Structured notes			284	101	Price based	Price (%)	77%	52%	108%	116%
					Net asset value	Price (%)	n/a	n/a	n/a	n/a
					Option pricing model	Equity volatility (%)	13%	14%	34%	23%
						Equity/Equity correlation	0.6	0.5	0.9	0.7
						Equity/FX correlation	-0.7	0.2	0.5	0.4
						Dividend yield (%)	1%	2%	5%	6%
						Interest rate volatility (bps)	49	n/a	86	n/a
						IR/IR correlation	0.8	n/a	0.8	n/a
					Present value techniques	Implied correlation	0.7	0.7	0.7	0.7
Derivatives										
– Rates	57	490	39	485	Option pricing model	Interest rate volatility (bps)	23	23	300	300
						Interest rate correlation	0.8	n/a	0.8	n/a
						IR/INF correlation	n/a	n/a	n/a	n/a
					Present value techniques	Reset spread (%)	2%	2%	2%	2%
						Prepayment rate (%)	n/a	5%	n/a	10%
						Inflation rate (%)	n/a	4%	n/a	4%
						Credit spread (bps)	46	n/a	46	n/a
– FX		477		479	Present value techniques	Inflation rate (%)	n/a	4%	n/a	4%

Valuation techniques and range of unobservable inputs (Level 3) – continued

	Assets		Liabilities		Valuation techniques	Significant unobservable inputs	Lower range		Upper range	
	2018	2017	2018	2017			2018	2017	2018	2017
– Credit	67	10	86	48	Present value techniques	Credit spread (bps)	8	2	364	424
						Implied correlation	0.7	0.7	0.7	1.0
						Jump rate (%)	12%	12%	12%	12%
					Price based	Price (%)	n/a	n/a	n/a	n/a
– Equity	68	107	54	128	Option pricing model	Equity volatility (%)	4%	5%	94%	129%
						Equity/Equity correlation	0.2	0.1	0.9	1.0
						Equity/FX correlation	–0.8	–0.9	0.5	0.8
						Dividend yield (%)	0%	0%	13%	21%
– Other	2	5	5		Option pricing model	Commodity volatility (%)	12%	9%	79%	42%
						Com/Com correlation	0.3	0.3	0.9	0.9
						Com/FX correlation	–0.5	–0.6	–0.5	–0.3
Available for sale										
– Debt	n/a	14			Price based	Price (%)	n/a	69%	n/a	90%
					Present value techniques	Credit spread (bps)	n/a	n/a	n/a	n/a
						Weighted average life (yr)	n/a	n/a	n/a	n/a
– Equity	n/a	467			Discounted cash flow	Annual accounts	n/a	n/a	n/a	n/a
					Multiplier method	Observable market factors	n/a	n/a	n/a	n/a
					Comparable transactions		n/a	n/a	n/a	n/a
At fair value through other comprehensive income										
– Debt					Price based	Price (%)	n/a		n/a	
– Loans and advances	2,379				Present value techniques	Prepayment rate	6%		6%	
– Equity	317				Present value techniques	Credit spread (%)	322		322	
						Inflation rate (%)	3%		3%	
						Other	63		80	
Total	**5,387**	**1,980**	**910**	**1,242**						

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 annual accounts 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 2018, 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.

Sensitivity analysis of Level 3 instruments

	Positive fair value movements from using reasonable possible alternatives		Negative fair value movements from using reasonable possible alternatives	
	2018	2017	2018	2017
Fair value through profit or loss				
Equity (equity derivatives, structured notes)	60	36	4	
Interest rates (Rates derivatives, FX derivatives)	43	56		
Credit (Debt securities, Loans, structured notes, credit derivatives)	39	27		
Available-for-sale				
Equity	n/a	9	n/a	14
Debt	n/a	1	n/a	
Fair value through other comprehensive income				
Debt				
Loans and advances	12			
Equity	5		10	
	159	**129**	**14**	**14**

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	
	2018	2017	2018	2017	2018	2017	2018[2]	2017
Financial Assets								
Loans and advances to banks[1]	445	569	7,152	9,855	20,742	16,576	28,339	27,000
Held-to-maturity investments	n/a	7,884	n/a	1,409	n/a	85	n/a	9,378
Loans and advances to customers[1, 3]	138		14,745	19,955	567,045	543,619	581,928	563,574
Securities at amortised cost	43,550	n/a	3,024	n/a	1,242	n/a	47,815	n/a
	44,132	**8,453**	**24,921**	**31,219**	**589,029**	**560,280**	**658,082**	**599,952**
Financial liabilities								
Deposits from banks [1]	128	29	24,433	25,276	7,314	7,642	31,875	32,947
Customer deposits [1]	6,695	8,875	50,922	41,209	22,172	27,349	79,789	77,433
Debt securities in issue	33,419	34,288	49,075	38,650	19,713	17,676	102,207	90,614
Subordinated loans	3,437	7,961	10,435	3,234		5,196	13,872	16,391
	43,678	**51,153**	**134,865**	**108,369**	**49,199**	**57,863**	**227,743**	**217,385**

1 Financial assets and liabilities that are on demand are excluded from the fair value hierarchy as their fair value approximates the carrying value.
2 The 2018 presentation was prospectively changed together with other IFRS9 changes and includes the reclassification of accrued interest from other assets and other liabilities to the corresponding balance sheet item of the host contract.
3 In 2018, the fair value of the loans and advances to customers as at 31 December 2017 is adjusted by the amount of the accrued interest (EUR 1,522 million). In 2017 the fair value of the accrued interest was reported, separate from loans and advances to customers, under other assets.

b) Non-financial assets and liabilities

ING Bank'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 2018, the estimated fair value of Property in own use and Investment property amounts to EUR 780 million (2017: EUR 774 million) and EUR 54 million (2017: EUR 65 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 2018, ING Bank has no non-financial liabilities measured at fair value (2017: none).

37 Derivatives and hedge accounting

Use of derivatives

ING Bank uses derivatives for economic hedging purposes to manage its asset and liability portfolios and structural risk positions as described in Note 50 ‘Risk management – Credit risk and Market risk’. The primary objective of ING Bank’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 Bank 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 Note 1 ‘Accounting policies’ in the section ‘IFRS 9 ‘Financial instruments’ – ‘Accounting policies applied from 1 January 2018’.

Fair value hedge accounting

ING Bank’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 Bank’s approach to manage market risk, including interest rate risk, is discussed in Note 50 ‘Risk management – Market risk’. ING Bank’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 Bank also exposes itself to credit risk of the derivative counterparty, which is not offset by the hedged item. ING Bank minimises counterparty credit risk in derivative instruments by clearing most of the derivatives through Central Clearing Counterparties. In addition ING Bank only enters into transactions with high-quality counterparties and requires posting collateral.

ING Bank 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 Bank, ING Bank 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 Bank 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 Bank follows a dynamic hedging strategy. This means that on the 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 hedging relationship.

ING Bank 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	Liabilities
As at 31 December 2018		
Hedging instrument on interest rate risk		
– Interest rate swaps	8,584	11,279
– Other interest derivatives	78	63

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 638 million (2017: EUR 671 million) respectively ‘Financial liabilities at fair value through profit or loss – Non-trading derivatives’ EUR 1,029 million (2017: EUR 1,084 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 1.14% for EUR and 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 2018	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	560	–14	–7,819	7,277	514	5,097	11,082	–11,067	5,630
– Other interest derivatives	–11	–53	–101	–55	–228	–325	–325	504	–593

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 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		–204		
– Debt instruments at amortised cost	16,843		687		–91		
– Debt securities in issue		40,154		1,500	247		
– Subordinated loans		11,648		47	56		
– Amounts due to banks		17,717		55	–52		
– Customer deposits and other funds on deposit		18,505		278	–11		
– Discontinued hedges			272	–35			
Total	**85,052**	**88,024**	**3,776**	**1,844**	**–54**	**62**	**7**
As at 31 December 2017					**–824**	**729**	**–95**

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.

Cash flow hedge accounting

ING Bank's cash flow hedges mainly consist of interest rate swaps and cross-currency swaps that are used to protect against its 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 Bank's approach to manage market risk, including interest rate risk and foreign currency exchange rate risk, is discussed in Note 50 'Risk management – Credit risk and Market risk'. ING

Bank 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 Bank 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 Bank considers whether the critical terms of the hedged item and hedging instrument closely align when assessing the presence of an economic relationship. ING Bank 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 Bank 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	Liabilities
As at 31 December 2018		
Hedging instrument on interest rate risk		
– Interest rate swaps	5,757	3,664
Hedging instrument on combined interest and FX rate risk		
– Cross currency interest rate derivatives	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 1,012 million (2017: EUR 617 million) respectively 'Financial liabilities at fair value through profit or loss – Non-trading derivatives' EUR 458 million (2017: EUR 339 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 1.21% for EUR, 2.53% for PLN and 2.49% for USD. The average rates for cross currency swaps used in cash flow hedge accounting is EUR 1.14 for EUR/USD.

The following table shows the net notional amount of derivatives designated in cash flow 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 cash flow hedging

As at 31 December 2018	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	–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	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 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.

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 Bank. The risk arises from the fluctuation in spot exchange rates between the functional currency of the subsidiaries and ING Bank'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 Bank's financial statements. ING Bank'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 Bank'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 Bank 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 Bank has the following derivative financial instruments used for net investment hedging;

Gross carrying value of derivatives used for net investment hedging

	Assets	Liabilities
As at 31 December 2018		
– FX forwards and futures	41	16

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 41 million (2017: EUR 29 million) respectively 'Financial liabilities at fair value through profit or loss – Non-trading derivatives' EUR 17 million (2017: EUR 71 million). The remaining derivatives are offset with other derivatives and collaterals paid or received.

For the main currencies the average exchange rates used in net investment hedge accounting for 2018 are EUR/USD 1.18, EUR/PLN 4.26, EUR/AUD 1.58 and EUR/THB 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

As at 31 December 2018	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
– FX forwards and futures	–4,085	–1,870		–54					–6,009

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	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 2018					
Net investments hedge					
- Investments in foreign operations	–71	540		71	2
- Discontinued hedges		–210			

38 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 Note 50 'Risk Management – Funding and liquidity risk'.

Assets by contractual maturity

2018	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	49,987						49,987
Loans and advances to banks	15,862	3,693	4,830	5,599	437		30,420
Financial assets at fair value through profit or loss							
– Trading assets	15,815	6,032	8,123	9,276	10,917		50,163
– Non-trading derivatives	275	323	173	1,059	841		2,672
– 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	55,778	17,689	39,443	177,387	302,031		592,328
Intangible assets			120	481		1,238	1,839
Other assets [2]	6,895	165	2,429	598	429	214	10,730
Remaining assets (for which maturities are not applicable) [3]						2,703	2,703
Total assets	**194,560**	**40,024**	**65,815**	**232,874**	**346,146**	**7,593**	**887,012**
2017 [4]							
Cash and balances with central banks	21,989						21,989
Loans and advances to banks	13,928	5,137	5,224	3,931	526		28,746
Financial assets at fair value through profit or loss							
– Trading assets	63,858	14,016	12,667	12,619	13,603		116,763
– Non-trading derivatives	124	147	213	789	912		2,185
– Designated as at fair value through profit or loss	488	967	1,839	351	597		4,242
Investments							
– Available-for-sale	1,319	2,313	4,301	31,852	25,962	3,983	69,730
– Held-to-maturity	1,020	127	657	2,975	4,564		9,343
Loans and advances to customers	63,122	18,414	40,350	163,444	289,569		574,899
Intangible assets			92	367		1,010	1,469
Other assets [2]	8,496	1,520	2,475	869	535	309	14,204
Remaining assets (for which maturities are not applicable) [3]						2,748	2,748
Total assets	**174,344**	**42,641**	**67,818**	**217,197**	**336,268**	**8,050**	**846,318**

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.

4 The amounts for the period ended 31 December 2017 have been prepared in accordance with IAS 39, the adoption of IFRS 9 led to new presentation requirements for 2018; prior period amounts have not been restated Reference is made to Note 1 'Accounting policies' for information on Changes in accounting principles, estimates and presentation of the consolidated annual accounts and related notes.

39 Liabilities by maturity

The tables below include all financial liabilities by maturity based on contractual, undiscounted cash flows. 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 Note 50 'Risk Management – Funding and liquidity risk' for a description on how liquidity risk is managed.

Liabilities by maturity

2018	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	10,506	1,068	1,940	21,571	2,242		2	37,330
Customer deposits	516,367	18,273	16,623	15,973	13,059			580,294
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	457	315	252	988	883		–583	2,313
– Designated at fair value through profit or loss	34,927	11,753	4,115	3,506	4,921		–43	59,179
Debt securities in issue	4,066	20,961	30,282	32,659	12,200		1,991	102,159
Subordinated loans				1,700	6,518	5,270	154	13,643
Financial liabilities	**572,110**	**55,561**	**58,357**	**84,140**	**47,513**	**5,270**	**3,181**	**826,133**
Other liabilities [3]	10,556	898	2,422	1,198	831			15,904
Non-financial liabilities	**10,556**	**898**	**2,422**	**1,198**	**831**	**–**	**–**	**15,904**
Total liabilities	**582,665**	**56,459**	**60,778**	**85,338**	**48,345**	**5,270**	**3,181**	**842,036**
Coupon interest due on financial liabilities	1,006	905	2,406	8,283	5,280	282		18,162
2017								
Deposits from banks	10,002	648	1,687	21,893	2,591			36,821
Customer deposits	494,841	18,510	23,773	10,855	4,711			552,690
Financial liabilities at fair value through profit or loss								
– Other trading liabilities	29,755	11,530	1,866	1,506	2,390		636	47,683
– Trading derivatives	2,476	2,420	4,520	8,224	5,947		2,326	25,913
– Non-trading derivatives	339	122	232	746	983		–76	2,346
– Designated at fair value through profit or loss	413	838	1,353	3,688	5,072		–149	11,215
Debt securities in issue	3,296	14,657	26,434	34,215	9,867		1,762	90,231
Subordinated loans					10,601	5,077	153	15,831
Financial liabilities	**541,122**	**48,725**	**59,865**	**81,127**	**42,162**	**5,077**	**4,652**	**782,730**
Other liabilities [3]	9,743	1,864	4,152	2,182	1,270			19,211
Non-financial liabilities	**9,743**	**1,864**	**4,152**	**2,182**	**1,270**	**–**	**–**	**19,211**
Total liabilities	**550,865**	**50,589**	**64,017**	**83,309**	**43,432**	**5,077**	**4,652**	**801,941**
Coupon interest due on financial liabilities [4]	1,109	1,033	2,829	9,521	8,764			23,256

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 Coupon interest excludes coupon interest on perpetual instruments.

40 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

	2018	2017
Banks		
– Cash and balances with central banks	1,471	1,569
– Loans and advances to banks	4,373	3,730
Financial assets at fair value through profit or loss	1,620	1,072
Financial assets at fair value through OCI	421	n/a
Securities at amortised cost	769	n/a
Investments	n/a	885
Loans and advances to customers	74,352	76,083
Other assets	734	813
	83,740	**84,152**

In some jurisdictions ING Bank N.V. has an obligation to maintain a reserve with central banks. As at 31 December 2018, the minimum mandatory reserve deposits with various central banks amount to EUR 9,359 million (2017: EUR 8,503 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 46 billion (2017: EUR 50 billion), in Germany to EUR 12 billion (2017: EUR 12 billion), in Belgium EUR 12 billion (2017: EUR 10 billion), in Australia to EUR 3 billion (2017: EUR 2 billion) and in the United States to EUR 1 billion (2017: EUR 1 billion).
The table does not include assets relating to securities lending as well as sale and repurchase transactions. Reference is made to Note 41 'Transfer of financial assets'.

41 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. Reference is made to Note 47 'Structured entities'.

Transfer of financial assets not qualifying for derecognition

	Securities lending				Sale and repurchase			
	Equity		Debt		Equity		Debt	
	2018	2017[1]	2018	2017[1]	2018	2017	2018	2017
Transferred assets at carrying amount								
Financial assets at fair value through profit or loss	2,962	3,995	1,170		2,396	2,120	4,334	6,864
Financial assets at fair value through other comprehensive income			168				325	n/a
Investments	n/a	2		364			n/a	621
Loans and advances to customers								
Securities at amortised cost			142				910	n/a
Associated liabilities at carrying amount								
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	2,373	2,148	2,225	2,599

1 Amounts have been restated to conform to the current year presentation.

The table above includes the associated liabilities which are reported after offsetting, compared to the gross positions of the encumbered assets.

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.

42 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

2018					Related amounts not offset in the statement of financial position		
		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	Financial instruments	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
	Other						
		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
	Other						
		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
		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
					–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 assets subject to offsetting, enforceable master netting arrangements and similar agreements

2017		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	1,838		1,838		1,728	110
	Other	7	–7				–
		1,845	**–7**	**1,838**	**0**	**1,728**	**110**
Financial assets at fair value through profit or loss							
Trading assets	Derivatives	20,878	–760	20,118	18,427	219	1,472
	Reverse repurchase, securities borrowing and similar agreements	68,050	–14,475	53,575	1,068	52,456	51
	Other						
		88,928	**–15,235**	**73,693**	**19,495**	**52,675**	**1,523**
Non-trading derivatives	Derivatives	45,176	–43,819	1,357	1,238	217	–98
		45,176	**–43,819**	**1,357**	**1,238**	**217**	**–98**
Loans and advances to customers	Reverse repurchase, securities borrowing and similar agreements	409	–209	200		200	
	Debit balances on customer accounts	157,892	–156,015	1,877	1,018	302	557
		158,301	**–156,224**	**2,077**	**1,018**	**502**	**557**
Other items where offsetting is applied in the statement of financial position		6,860	–6,366	494			494
Impact of enforceable master netting arrangements or similar arrangements[1]	Derivatives				–5,929	4,208	1,721
					–5,929	**4,208**	**1,721**
Total financial assets		**301,110**	**–221,651**	**79,459**	**15,822**	**59,330**	**4,307**

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 received 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						
		37	**–36**	**0**	**0**	**0**	**–0**
Customer deposits	Repurchase, securities lending and similar agreements	224	–186	37		37	
	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
	Other						
		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
					–0		0
		–	**–**	**–**	**–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.

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

2017		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	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**						
Deposits from banks	Repurchase, securities lending and similar agreements	4		4		4	–
	Other	68	–8	60			60
		72	**–8**	**64**	**–**	**4**	**60**
Customer deposits	Repurchase, securities lending and similar agreements	209	–209	–	–	–	–
	Corporate deposits	11,508	–11,022	486			486
	Credit balances on customer accounts	156,465	–144,991	11,474	1,021	–	10,453
		168,182	**–156,222**	**11,960**	**1,021**	**–**	**10,939**
Financial liabilities at fair value through profit or loss							
Trading liabilities	Derivatives	21,356	–975	20,381	19,292	302	787
	Repurchase, securities lending and similar agreements	51,445	–14,475	36,970	1,068	35,792	110
	Other						
		72,801	**–15,450**	**57,351**	**20,360**	**36,094**	**897**
Non-trading derivatives	Derivatives	46,765	–45,251	1,514	1,261	125	128
Other items where offsetting is applied in the statement of financial position		5,393	–4,720	673			673
Impact of enforceable master netting arrangements or similar arrangements[1]	Derivatives				–6,820	6,228	592
		–	–	–	**–6,820**	**6,228**	**592**
Total financial liabilities		**293,213**	**–221,651**	**71,562**	**15,822**	**42,451**	**13,289**

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.

43 Contingent liabilities and commitments

In the normal course of business, ING Bank is party to activities where risks are not reflected in whole or in part in the consolidated annual accounts. In response to the needs of its customers, the Bank 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	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Contingent liabilities in respect of														
– Discounted bills	1	1											1	1
– Guarantees	18,369	15,647	374	571	1,324	944	2,094	2,560	4,095	4,189			26,256	23,911
– Irrevocable letters of credit	10,346	9,453	4,499	4,746	998	1,146	374	176	3	12			16,220	15,533
– Other	52	58					115	223		–			167	281
	28,768	**25,159**	**4,873**	**5,317**	**2,322**	**2,090**	**2,584**	**2,959**	**4,098**	**4,201**	**–**	**–**	**42,644**	**39,726**
Irrevocable facilities	63,499	56,459	2,699	2,150	8,470	7,504	32,717	30,331	6,876	7,825			114,261	104,269
	92,266	**81,618**	**7,572**	**7,467**	**10,792**	**9,594**	**35,301**	**33,290**	**10,974**	**12,026**	**–**	**–**	**156,905**	**143,995**

Reference is made to Parent company annual accounts – Notes to the parent company annual accounts, Note 30 'Other' for further information on Guarantees issued by ING Bank N.V.

Guarantees relate both to credit and non-credit substitute guarantees. Credit substitute guarantees are guarantees given by ING Bank 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 Bank 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 Bank'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.

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 Bank'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.

Furthermore, ING Bank leases assets from third parties under operating leases as lessee. The future rental commitments to be paid under non-cancellable operating leases are as follows:

Future rental commitments for operating lease contracts

	2018	2017
2018		268
2019	260	195
2020	230	165
2021	201	152
2022	166	116
Years after 2022	521	356

44 Legal proceedings

ING Bank N.V. 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.

Criminal investigations: On 4 September 2018, ING announced that it has 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 agreement ING has agreed to pay a fine of EUR 675 million and EUR 100 million for disgorgement. As previously noted, in connection with the investigations ING 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.

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. While a provision has been recognised, the review of such issues is ongoing.

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. On 25 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. If the Court allows plaintiffs to file that complaint, ING Bank will continue to defend itself against the allegations. Currently, it is not possible to provide an estimate of the (potential) financial effect of this claim.

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. ING Bank had initiated an arbitration procedure against OYAK in which ING Bank sought to be held harmless for these claims. The arbitration court dismissed ING's prayers for relief. 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.

VEB Fortis claim: In January 2011, the Dutch Association of Stockholders (*Vereniging van Effectenbezitters*, "VEB") issued a writ alleging that investors were misled by the prospectus that was issued with respect to the September 2007 rights issue of Fortis N.V. (now Ageas N.V.) against Ageas N.V., the underwriters of such rights issue, including ING Bank, and former directors of Fortis N.V. According to the VEB the prospectus shows substantive incorrect and misleading information. The VEB stated that the impact and the risks of the sub-prime crisis for Fortis and Fortis' liquidity position were reflected incorrectly in the prospectus. The VEB requested a declaratory decision stating that the summoned parties acted wrongfully and are therefore responsible for the damages suffered by the investors in Fortis. In March 2016, Ageas, VEB and certain other claimants announced that the claim in relation to Fortis had been settled. Ageas agreed to pay EUR 1.2 billion to investors as compensation. On 13 July 2018, the Court of Appeal declared the settlement agreement binding. The settlement also included a third-party release clause, releasing ING and the other underwriting banks from the claims made by VEB on behalf of investors in this matter.

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.

Interest surcharges claims: ING received complaints and is 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 residential property (*eigenwoningfinanciering*). ING is reviewing the relevant product portfolio. Although the review is still ongoing, a provision has been taken for certain of these complaints.

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, for which ING's appeal remains pending. In a separate proceeding the Belgian authorities were also investigating ING Luxembourg for allegedly assisting third parties in 2001 to commit tax fraud in the context of the purchase of the shares of a different cash company. In December 2018, the Court has agreed upon a global (civil and criminal) settlement of any claims in connection with this separate proceeding, which settlement is binding.

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 a class action filed by a customer association. 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 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.

45 Consolidated companies and businesses acquired and divested

Acquisitions

Payvision

ING Bank obtained control over Payvision Holding B.V. (Payvision), a fast-growing, leading international omnichannel payments service provider, by acquiring 75% of its shares on 13 March 2018. This is in scope of IFRS 3 'Business combinations'.
The transaction will enable ING to strengthen its footprint in omnichannel payments services and expand its merchant services for its business customers, in particular in the fast-growing e-commerce segment. Total consideration paid of the 75% of shares was, including deferred and contingent consideration, EUR 260 million.

The share purchase agreement includes also an arrangement for possible acquisition of the remaining 25% shares of Payvision. This consists of a put option exercisable by the original shareholders as well as a call option exercisable by ING. In summary, the put is exercisable after 3 years with an exercise price of fair market value (FMV) unless the fair value of the total business is less than EUR 210 million, then the exercise price is EUR 1. The call option by ING has similar terms but is only exercisable after 5 years. In addition, there are some early redemption features at various prices at various times. The put option, exercisable by the non-controlling interest shareholders, is reported as financial liability with initial recognition through shareholders' equity of EUR 87 million.

The following table summarises the acquisition date fair value of consideration transferred.

Consideration transferred

	Payvision
Cash paid	213
Deferred consideration	25
Contingent consideration	22
Total purchase consideration	**260**

Contingent consideration is payable by ING to the original shareholders of Payvision in the amount ranging from EUR 0 up to EUR 25 million in 3 tranches upon achievement of 3 milestones. The milestones should be achieved within (1) 6 months after completion of the acquisition, (2) 6 months after achieving milestone 1 and (3) 3 months after achieving milestone 2 (with some additional grace periods of 4 months per milestone permitted). The amounts are payable in tranches of EUR 7 million, EUR 7 million and EUR 11 million respectively. The probability of achievement of the set milestones and the time value of money were taken into consideration in the measurement of the contingent consideration at fair value of EUR 22 million on the date of acquisition. Since the date of acquisition there were no changes in the assumptions used to develop the estimate of the fair value of the contingent consideration.

In October 2018 ING made a first milestone payment of EUR 7 million.

The incurred acquisition costs amounts to EUR 1 million and are included in the 'other operating expenses' in the Consolidated statement of profit or loss.

The assets and liabilities recognised as a result of the acquisition are as follows;

Assets and liabilities recognised as a result of the acquisition

	Payvision
Cash and balances with central banks	116
Loans and advances to banks	32
Financial assets at fair value through other comprehensive income	2
Property and equipment	3
Intangible assets	125
Other assets	17
	295
Customer deposits	1
Current tax liability	2
Deferred tax liability	30
Other liabilities	166
	199
Net identifiable assets	**97**
Less; non-controlling interest	24
Net identifiable assets acquired	**72**

The fair value of the identified intangible assets are determined using an income approach.

The deferred tax liability comprises the deferred tax resulting from the initial recognition of intangible assets in the business combination. The other liabilities mainly include merchant payables that are part of the normal course of business of Payvision.

The amount of the non-controlling interest is determined based on the proportionate share of the subsidiary's identifiable net assets.

Goodwill recognised

	Payvision
Total purchase consideration	260
Net identifiable assets acquired	72
Goodwill recognised	**188**

On 20 February 2018 ING acquired 90% of the shares of Makelaarsland B.V. for a total consideration of EUR 14 million. The acquisition of Makelaarsland B.V. led to a recognition of goodwill of EUR 14 million.

The total goodwill of EUR 202 million, from the acquisition of both Payvision and Makelaarsland recognised in the first half of 2018, comprises the the fair value of expected synergies arising from the acquisitions.

Goodwill arising on these acquisitions is not expected to be deductible for tax purposes.

The acquired businesses contributed 'revenues' of EUR 40 million and net profit of EUR 6 million to the group for the period from 1 April 2018 to 31 December 2018.

If the acquisitions had occurred on 1 January 2018, consolidated 'revenues' and consolidated net profit for the year ended 31 December 2018 would have been EUR 51 million, and EUR 6 million respectively.

There were no significant acquisitions in 2017 and 2016.

Divestments

In December 2018, reached an agreement to sell part of the ING Lease Italy business. Under the terms agreed, ING will receive EUR 500 million cash consideration and a EUR 1 billion Senior Loan facility for the portfolio of lease receivables. The Italian lease business was previously included in the business line segment Wholesale Banking and geographical segment Other Challengers. The carrying amount of the lease receivables, previously classified as loans and advances per transaction date amounted to EUR 1,389 million. The sale is expected to take place during 2019, with a negotiated long stop date of 31 December 2019.

Reference is made to Note 12 ‘Assets and liabilities held for sale’ and Note 25 ‘Result on the disposal of group companies’.

In 2017 and 2016 there were no significant divestments of consolidated companies.

46 Principal subsidiaries, investments in associates and joint ventures

For the majority of ING’s principal subsidiaries, ING Bank 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 Bank 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 Bank 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	
			2018	2017
Subsidiary	**Statutory place of Incorporation**	**Country of operation**		
Bank Mendes Gans N.V.	Amsterdam	the Netherlands	100%	100%
ING Belgium S.A./N.V.	Brussels	Belgium	100%	100%
Record Bank[1]	Brussels	Belgium	n/a	100%
ING Luxembourg S.A.	Luxembourg City	Luxembourg	100%	100%
ING-DiBa AG	Frankfurt am Main	Germany	100%	100%
ING Bank Slaski S.A.[2]	Katowice	Poland	75%	75%
ING Financial Holdings Corporation	Delaware	United States of America	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	Bangkok	Thailand	25%	25%

1 During 2018, ING merged Record Bank into ING Belgium S.A./N.V.
2 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 32 'Segments'.

47 Structured entities

ING Bank'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 Bank'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 annual accounts, 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 annual accounts of ING Bank 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 Bank enters into liquidity management securitisation programmes in order to obtain funding and improve liquidity. Within the programme ING Bank 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 Bank acts as investor of the securitised notes. ING Bank 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 Bank as collateral in the money market for secured borrowings.

ING Bank originated various securitisations, as at 31 December 2018 these consisted of approximately EUR 66 billion of senior and subordinated notes, of which approximately 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 Bank's Consolidated statement of financial position and profit or loss.

In 2018, there are no non-controlling interests as part of the securitisation structured entities that are significant to ING Bank. ING Bank for the majority of the securitisation vehicles provides the funding for the entity except for EUR 5 billion.

In addition ING Bank originated various securitisations for liquidity management optimisation purposes. As at 31 December 2018, these consisted of approximately EUR 4 billion of senior secured portfolio loans, which have been issued to ING subsidiaries in Germany and Luxemburg. 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 Bank's consolidated statement of financial position and profit or loss.

2. Consolidated ING originated Covered bond programme (CBC)

ING Bank 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 Bank.

Covered bond programme

	Fair value pledged mortgage loans	
	2018	2017[1]
Dutch Covered Bond Companies	24,336	27,382
	24,336	**27,382**

1 Amounts have been restated to conform to the current year presentation.

In addition, subsidiaries of ING in Germany, Belgium and Australia also issued covered bonds with pledged mortgages loans of approximately EUR 14 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 Bank.

3. Consolidated ING sponsored Securitisation programme (Mont Blanc)

In the normal course of business, ING Bank structures financing transactions for its clients by assisting them in obtaining sources of liquidity by selling the clients' receivables or other financial assets (also referred to as factoring) to an ING sponsored Special Purpose Vehicle (SPV). The senior positions in these transactions are 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 market.

In its role as administrative agent, ING Bank facilitates these transactions by acting as administrative agent, swap counterparty and liquidity provider to Mont Blanc Capital Corp. ING Bank also provides support facilities (i.e. liquidity) backing the transactions funded by the conduit. The types of asset currently in the Mont Blanc conduit include trade receivables, consumer finance receivables, car leases and residential mortgages.

ING Bank supports the commercial paper programmes by providing the SPV 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 1,173 million (2017: EUR 1,139 million). The drawn liquidity amount is nil as at 31 December 2018 (2017: nil).

The standby liquidity facilities are reported under irrevocable facilities. All facilities, which vary in risk profile, are granted to the SPV subject to normal ING Bank 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 entity (SPE). 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 SPE 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 2018 amounted to EUR –33 million (2017: EUR –41 million); fair value changes on this swap recognised in the statement of profit or loss in 2018 were EUR 8 million (2017: EUR –36 million). Service fee income recognised, for the role as administrative agent, in the statement of profit or loss in 2018 amounted to EUR 2 million (2017: EUR 2 million). The cumulative income recognised in profit or loss since derecognition amounts to EUR 13 million.

5. Other structured entities

In the normal course of business, ING Bank 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 annual accounts of ING Bank, as ING facilitates these transactions as administrative agent by providing structuring, accounting, funding, lending, and operation services.

ING Bank offers various investment fund products to its clients. ING Bank does not invest in these investment funds for its own account nor acts as the fund manager.

48 Related parties

In the normal course of business, ING Bank 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 Bank 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 34 '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.

Transactions with ING Groep N.V. are eliminated on consolidation. ING Bank forms part of ING Group and also enters into transactions with ING Group. These transactions vary from financing activities to regular purchase and sales transactions. Disclosed in the table below, are the transactions with ING Groep N.V.

Subsidiaries

Transactions with ING Groep N.V.

	2018	2017[1]
Assets	140	377
Liabilities	34,902	21,277
Income received	26	26
Expenses paid	629	472

1 Amounts have been restated to conform to the current year presentation.

Liabilities to ING Groep N.V. mainly comprise long-term funding.

Associates and joint ventures

Transactions with ING Bank's main associates and joint ventures

	Associates		Joint ventures	
	2018	2017	2018	2017
Assets	54	120		9
Liabilities	98	86	1	5
Off-balance sheet commitments	120	92		1
Income received	2	8		
Expenses paid		6		

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) and post-employment benefit plans are transactions with related parties. These transactions are disclosed in more detail as required by Part 9 Book 2 of the Dutch Civil Code in the remuneration report included in the annual report. The relevant sections of the remuneration report therefore form part of the annual accounts.

In 2018 and 2017, 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)

2018 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 (Executive Board and Management Board Banking)

2017 in EUR thousands	Executive Board of ING Groep N.V. [1]	Management Board Banking [2,3]	Total
Fixed Compensation			
– Base salary	4,399	3,772	8,171
– Collective fixed allowances [4]	1,418	1,180	2,598
– Pension costs	96	118	214
– Severance benefits	1,204		1,204
Variable compensation			
Upfront cash		463	463
Upfront shares	226	485	711
Deferred cash		694	694
Deferred shares	339	728	1,067
Other			
Total compensation	**7,682**	**7,440**	**15,122**

1 In 2017 two members left and two members joined the Executive Board. The table includes their compensation earned in the capacity as Board members.
2 Excluding members that are also members of the Executive Board of ING Groep N.V.
3 In the Management Board Banking, excluding the Executive Board members, one member left and one member joined in 2017. The table includes their compensation earned in the capacity as Board members.
4 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 103,317.

Key management personnel compensation (Supervisory Board)

in EUR thousands	2018	2017
Total compensation	1,032	1,022

The table above shows the fixed remuneration, expense allowances and attendance fees for the Supervisory Board for 2018 and 2017.

Loans and advances to key management personnel

	Amount outstanding 31 December		Weighted average interest rate		Repayments	
in EUR thousands	2018	2017	2018	2017	2018	2017
Executive Board members	2,681	2,681	1.8%	1.8%		
Management Board Banking	550	550	2.3%	2.3%		
Supervisory Board members						
Total	**3,231**	**3,231**			–	–

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	2018	2017	2018	2017
Executive Board members	226,639	202,357	68,467	174,318
Management Board Banking	159,393	112,342	27,240	37,415
Supervisory Board members	54,065	172,734		113,385
Total number of shares and stock options	**440,097**	**487,433**	**95,707**	**325,118**

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 2018 and included in Total expenses in 2018, relating to the fixed expenses of 2018 and the vesting of variable remuneration of earlier performance years, is EUR 12 million.

49 Subsequent events

There are no subsequent events to report.

50 Risk Management

ING Bank Risk Management

As a global financial institution with a strong European base, offering banking services, ING is exposed to a variety of risks. ING operates through a comprehensive risk management framework and integrates risk management in its daily business activities and strategic planning. This promotes the identification, measurement and control of risks at all levels of the organisation so that ING Bank's financial strength can be safeguarded. Taking measured risks is the core of ING's business.

Risk management supports the Management Board Banking in formulating the risk appetite, strategies, policies, limits and provides a review, oversight and support function throughout ING on risk-related items. The main financial risks ING is exposed to are 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. Furthermore, ING is also exposed to non-financial risks, e.g. operational and compliance risks. The ING Bank Chief Risk Officer (CRO) is also the CRO of ING Bank. The way ING manages these risks on a day-to-day basis is described in this Risk Management section.

The Risk Management section describes the key risks that arise from ING's business model. It explains how the risk management function is embedded within the organisation based on the 'three lines of defence'. The key risks resulting from the bank's business model are managed by dedicated risk management departments, with various specific areas of expertise. The risk management section provide qualitative and quantitative disclosures about credit, market, liquidity and funding, business, operational and compliance risks.

Basis of disclosures

The risk management section is part of the notes to the consolidated financial statements in which the nature and the extent of the risks as required by IFRS-EU standards are disclosed. This 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 and capital 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 and capital data, and timing differences in exposure values (IFRS 9 models report ECL 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.

Purpose and business model

The purpose of ING's risk management function is to support the ambition of ING to be the primary bank for our customers, empowering the business through an integrated enterprise-wide risk management platform. The following principles support this purpose:

- The risk management function is embedded in all levels of ING's organisation and is part of the daily business activities and strategic planning to have a sustainable competitive advantage;
- Products and portfolios are structured, underwritten, priced, approved and managed properly and compliance with internal and external rules is monitored;
- Delegated authorities are consistent with the overall bank strategy and risk appetite; and
- Transparent communication is provided to internal and external stakeholders on risk management.

Risk governance

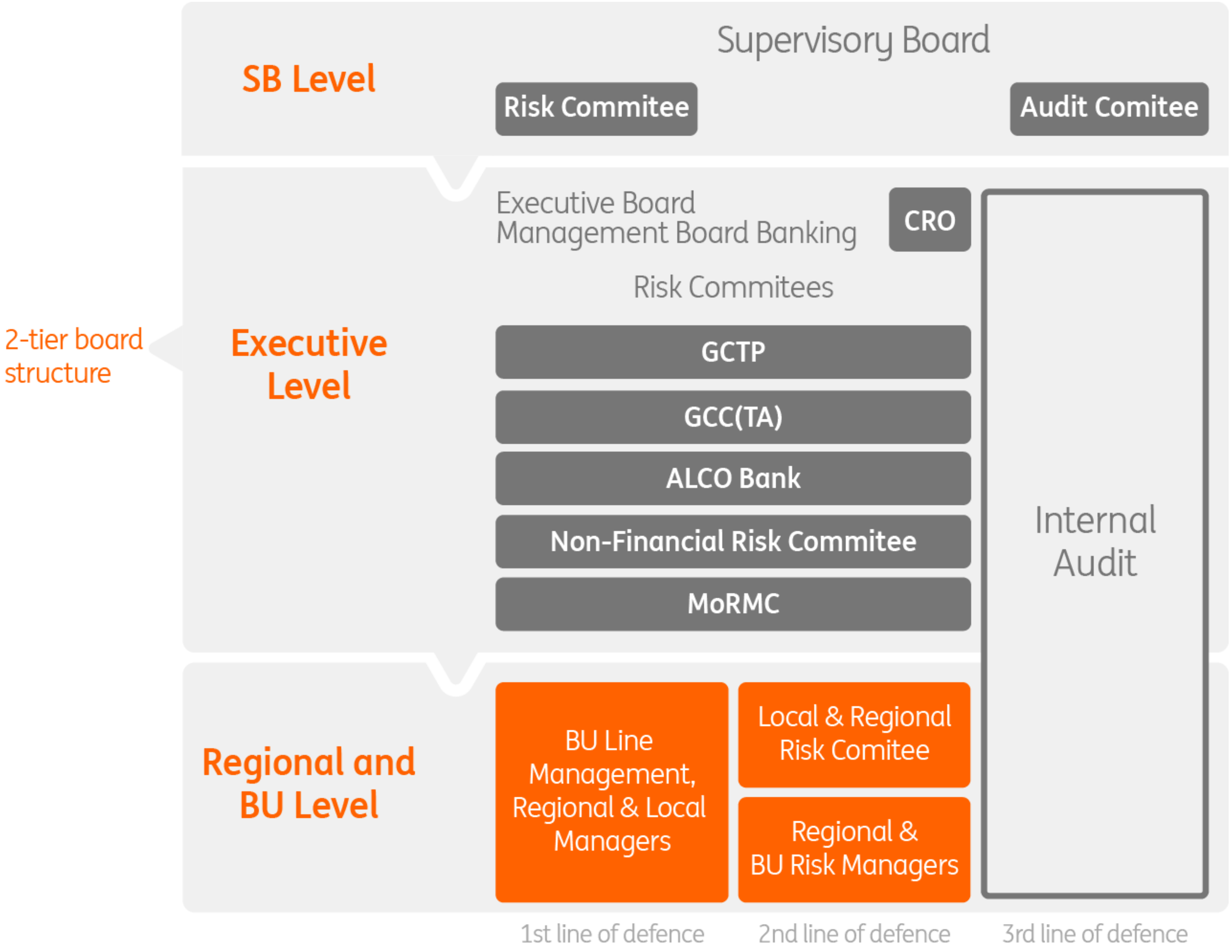
Effective risk management requires firm-wide risk governance. ING's risk and control structure is based on the 'three lines of defence' governance model, whereby each line has a specific role and defined responsibilities in such a way that the execution of tasks is separated from the control of the same 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 EB and the SB, and is cascaded throughout ING. The MBB is composed of the Management Board Banking of ING Bank and the heads of the business lines.

The heads of ING's business lines and their delegates form the first line of defence and have primary accountability for the performance, operations, compliance, and effective control of risks affecting their respective businesses. They originate loans, deposits, onboard clients, monitor transactions and other products within applicable frameworks and limits, they need to know ING's customers and are best-positioned to act in both the customers' and ING's best interest. The COO is responsible for proper security and controls on global applications and IT-platforms servicing the Bank.

The second line of defence consists of oversight functions (a.o. Finance, Legal, HR, Risk) with a major role for the risk management organisation headed by the Chief Risk Officer (CRO). Risk Management is responsible for (i) the development of overall policies and guidance, (ii) objectively challenge the execution, management, and control processes and (iii) coordinate the reporting of risks and controls by the first line of defence. It also has an escalation/veto power in relation to business activities that are judged to present unacceptable risks to ING.

The internal audit function forms the third line of defence. It provides an on-going independent (i.e. outside of the businesses and the risk organisation) and objective assessment of the effectiveness of internal controls of the first two lines, including financial and non-financial risk management.

The graph below 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 (Executive Board (EB) for ING Group and Management Board Banking (MBB) for ING Bank) and the Supervisory Board (SB); both tiers play an important role in managing and monitoring the risk management framework.

- The SB is responsible for supervising the policy of the EB and the MBB, the general course of affairs of ING Bank, ING Bank and its business (including its financial policies and corporate structure). For risk management purposes the SB is advised by two of its sub-committees:
- The Audit Committee, which assists the SB in monitoring the integrity of the financial statements of ING Bank and ING Bank, in monitoring the compliance with legal and regulatory requirements, and in monitoring the independence and performance of ING's internal and external auditors; and
- The Risk Committee, which assists and advises the SB 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 Bank, 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 Bank 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 ensures 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. Every quarter, the CRO reports to the SB committees on ING's risk appetite levels and on ING's risk profile. In addition, the CRO briefs the SB committees on developments in internal and external risk related issues and ensures the SB committees 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 (Environmental and Social Risk or ESR) risks. The GCTP meets on a monthly basis. In addition, the Credit & Trading Risk Policy Committee (CTRC) is the highest level body, with the exception of the GCTP and the Management Board Banking, authorised to discuss and approve policies, methodologies, and procedures related to Credit Risk;
- Global Credit Committee – Transaction Approval (GCC(TA)) discusses and approves transactions which 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 (incl. major changes) for risk identification, measurement, mitigating and monitoring/ reporting. The minimum frequency of the NFRC Bank is quarterly; and
- The Model Risk Management Committee (MoRMC) has been established to align overall model strategy, model risk appetite, supporting model frameworks, policies and methodologies.

Regional and business unit level

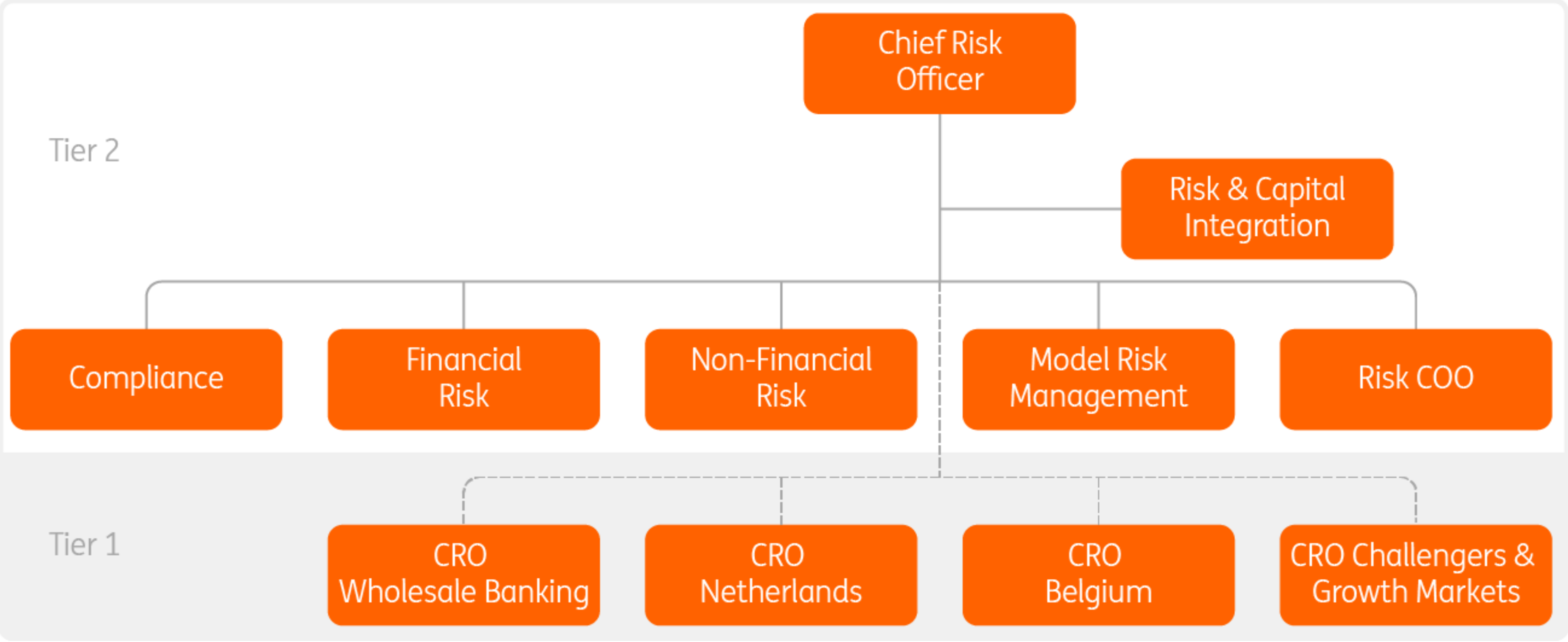
ING's regional and/or business unit management have primary responsibility for the management of risks (credit, market, funding and liquidity, operational and compliance risks) that arise in their daily operations. They are accountable for the implementation and execution of appropriate risk frameworks affecting their businesses in order to comply with procedures and processes at the corporate level. The implementation is adapted to local requirements, if necessary. 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. To assess client integrity risk, local Client Risk Integrity Committees (CIRCs) have been set-up. These CIRCs have a final decision on client acceptance or client off-boarding, from a risk-based perspective, in the areas of Financial Economic Crime (FEC), 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. New requirements and regulations have been introduced and implemented. To be able to effectively address these internal and external (market and regulatory) developments and challenges, ING regularly reviews the set-up of its risk-management organisation to better support the Bank's Think Forward strategy and enhance the interconnectedness of the risk oversight responsibilities in the business units with the global risk functions.

Currently, the global risk function has a two-tier governance structure. The risk officers in Tier 1 focus more on risk management within the local unit and the risk officers in Tier 2 focus on setting risk appetite, policies and monitoring the work in Tier 1 (i.e. more responsibility in managing its own risk issues, and determining and putting in place adequate controls). The organisation chart illustrates the reporting lines in 2018 for the risk organisation:



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 improve balance of head office policy and standard setting versus local implementation efforts in line with the Think Forward strategy (empowering countries) 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 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, that entities and support functions have to adhere to. 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 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 and is a 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 Chief Executive Officers (CEO's) and to 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. In addition, 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 to 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 the (1) governance setting the responsibilities, (2) the model risk appetite, (3) model risk management policies and standards as well as (4) the model management inventory and tooling. MoRM monitors global model risk and model performance.

Last but not least, the validation teams provide independent model validation which starts with the determination that a model is appropriate for its intended use 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 hold every employee accountable for his/her actions.

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 has been set as 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 an important 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 be always 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.

To support the further embedding of risk culture into business practices, ING has initiated different programmes and issued several guidelines. Risk awareness is to be 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. Part of the training curriculum to increase risk awareness is the Promoting Integrity Programme (PIP), which is a long-term, global, educational, and behavioural change programme supported by the EB and MBB for all ING employees. With the programme, ING aims to gain a sound risk culture and that every employee in every part of the organisation understands how his/her actions and behaviour can help earn and retain customer and stakeholder trust. Additional modules with topics such as 'Data@Risk' (on dealing with data), 'Let's speak up' and a KYC awareness module were added to the programme in 2018. To enhance risk awareness, these topics are discussed between managers and employees through dialogue sessions that managers organise within their teams to create a clear and consistent understanding of each subject. The endorsement from the executive level and the emphasis on communication strengthen the culture.

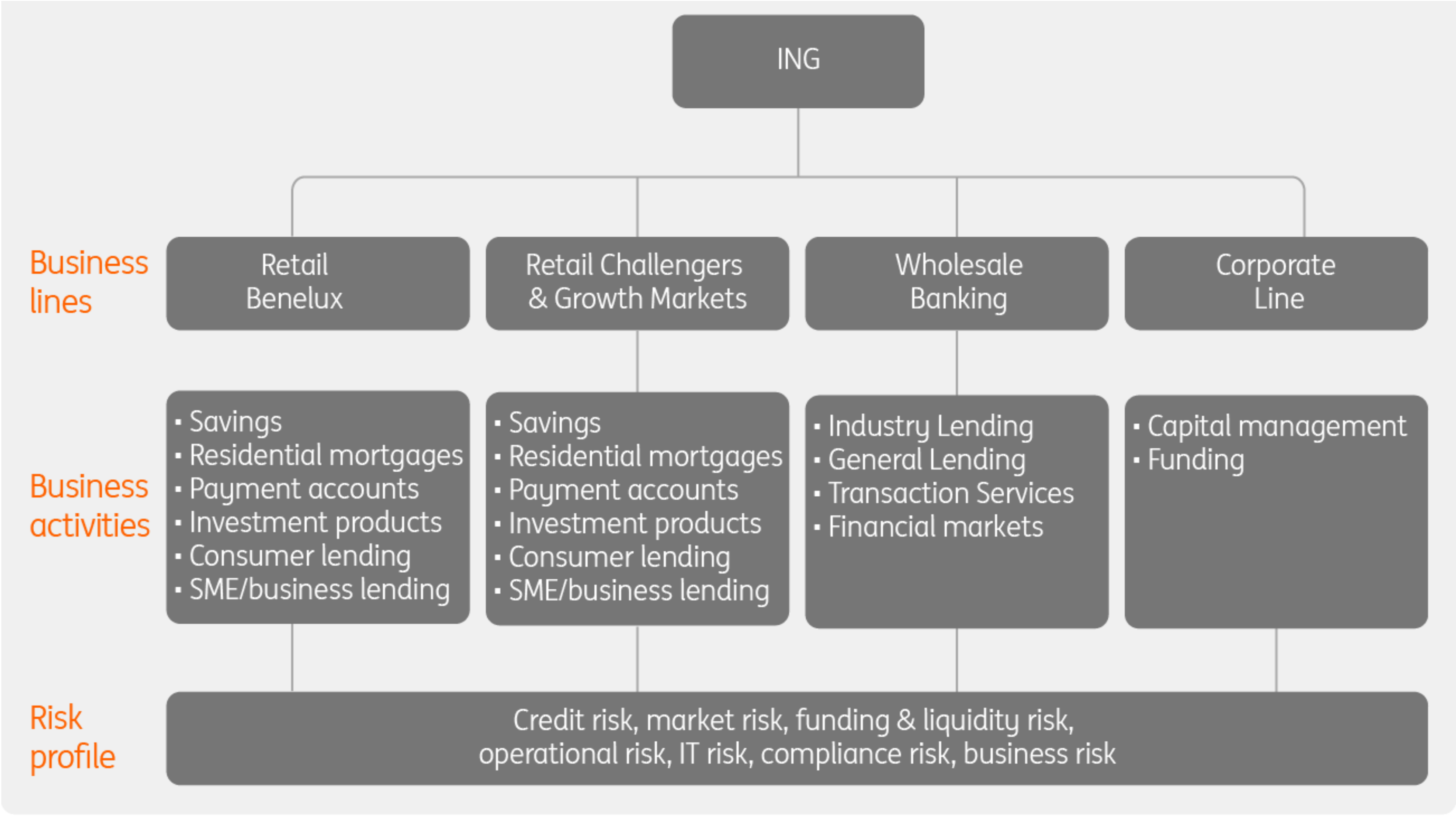
In addition to the above, a new Centre of Excellence (CoE) on Behavioural Risk was recently set up. The purpose of this CoE is to strengthen ING's management of risks by assessing behaviours within our organisation that could potentially impact our reputation and performance. This CoE will be responsible for carrying out assessments on risk behaviour to identify, analyse and intervene in high-risk behaviours. These Behavioural Risk Assessments (BRAs) aim to accomplish the same objective: to assess the risk culture within ING and to provide support in improving if needed.

In the Netherlands, employees of all financial institutions – and that includes ING – are required to take the Banker's Oath. This legal 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.

Lastly, 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

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, mitigate, and manage 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 and if 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 that current control measures 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 commercial 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 and control

Each identified risk is assessed to determine the importance, or risk level. 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 either confirm the risk level or detect change.

The importance of a risk is assessed based on the likelihood 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 is expected to have a modest financial impact, may not be mitigated and have the consequences accepted based on the decision of business management.

Risks can be controlled by mitigating measures that either lower the likelihood the risk occurs or that lower the impact when they occur. The ultimate measure to lower risk is to stop the activity or service that causes the risk (risk avoidance). Risk controlling and mitigating measures are defined and maintained at both the bank wide and local level.

Monitoring and reporting

By monitoring the risk control measures, ING checks if they are executed, complied with, have the expected mitigating effects and follow the development of the risks and their risk levels. Risk reporting provides senior and local management with information needed to manage risk.

Risk Appetite Framework

The ING Group Risk Appetite Framework (RAF) combines regulatory requirements, bottom-up risk identification and assessment with the ING's risk ambitions to set several overarching Risk Appetite Statements. The ING RAF is embedded in the ING's planning process via Risk Appetite Statements that are used as a boundary for setting ING's strategic and financial planning. An assessment how these plans compare vis-à-vis these boundaries is part of the quarterly review cycle of the Dynamic Planning (DP) process. In this planning process, overseen by the EB/MBB, detailed budgetary targets and objectives are set on a rolling three year basis.

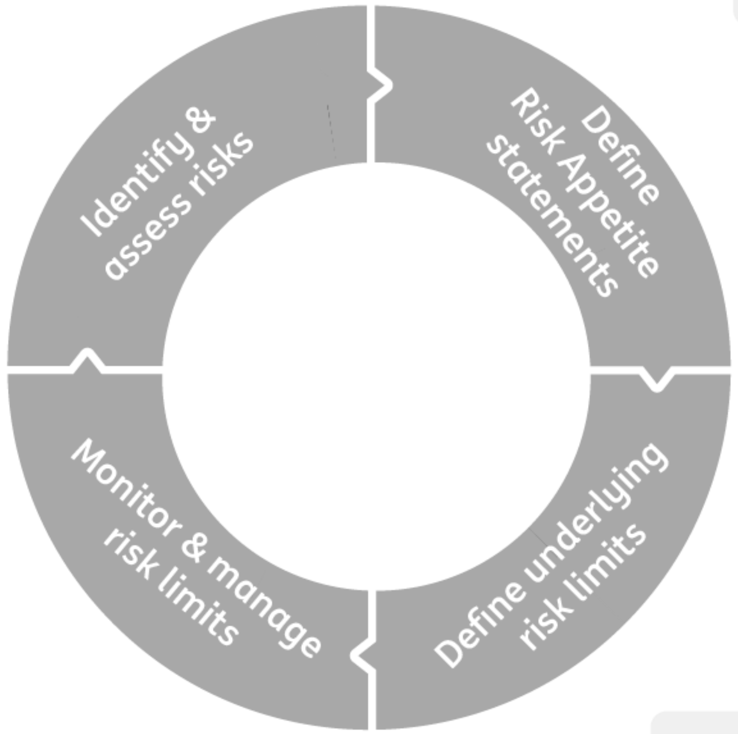
Process

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 is approved by the SB 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 and ambitions, 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.

Identify & assess risks
- Survey
- Interviews

Define Risk Appetite statements
Risk Appetite Framework
- Solvency Risk Appetite
- Liquidity & Funding Risk Appetite
- Credit Concentration Risk Appetite
- Market Event Risk Appetite

Annual MBB & SB approval



Monitor & manage risk limits
- Quarterly Review Cycle
- Integrated Financial Risk Report
- Stress testing
- Recovery Plan

Define underlying risk limits
- Credit Risk Appetite Framework
- Trading Book Risk Appetite Statements
- IRRBB Risk Appetite Statements
- Business risk appetite statements
- Liquidity & Funding Appetite Statements
- Non-Financial Risk Appetite Statements

GCTP, ALCO Bank, NFRC Bank, etc
and local c'tees approval

Step 1. Identify & assess ING's key risks

Setting the RAF starts with a multi-dimensional step to identify and assess the risks ING is facing when executing its strategy, including detecting unidentified risks that are not yet controlled within ING's risk management function & assess their potential impact; 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.

ING has the ambition to be and remain a strong bank, resilient to possible adverse events on a standalone basis, and able to address such developments based on its own strengths and resources. To be able to execute the strategy, ING has formulated the following risk and capital targets:
- have a rating strong enough to support the execution of ING's Funding & Capital issuance plan;
- be able to restore the capital and liquidity position following a stress situation on its own strength;
- be in a position to meet current and forthcoming regulatory requirements and targets; and
- have a risk profile that compares favourably to its main banking peers.

Step 2. Set Risk Appetite Framework

Based on ING's risk assessment and risk ambition, specific targets are set for both financial and non-financial risks. For financial risks, ING expresses its risk appetite as a tolerance from which key ratios may deviate from their target levels where the high level risk ambition is translated into quantitative targets for solvency risk, concentration risk, business risk and funding & liquidity risk, whereas for non-financial risks, to assess that the organisation's actual risk exposure is commensurate with its strategic objectives and that exposure beyond the tolerance risk levels is timely identified and acted upon.

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 down into the organisation to the lowest level. Risk appetite statements are then translated into dedicated underlying risk limits which 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 MTP process as well as for the establishment of key performance indicators and targets for senior management.

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.

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 the IFRS9 calculations and standards integrated in January 2018. The stress testing models are subject to review by the Model Risk Management department.

Regulatory environment

After the turmoil in the financial markets and the subsequent need for governments to provide aid to financial institutions, financial institutions have been under more scrutiny from the public, supervisors and regulators. This has resulted in more stringent regulations intended to avoid future crises in the financial system and taxpayer's aid in the future.

Basel III revisions, CRR/CRD IV and upcoming regulations

In Europe, some changes are currently made to the CRR/CRD IV, among others the formal introduction of the Leverage Ratio and of Pillar 2 Guidance. This will be implemented in EU regulation through the CRR II / CRD V, which is expected to be formalised in the first half of 2019. Next to this, 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.

Principles for Effective Risk Data Aggregation and Risk Reporting

The BCSB239 principles are applied in the group risk data and risk reporting chain. In addition, the principles are incorporated in ING's bank-wide internal control framework. This framework is rolled-out bank-wide, expanding the application of the principles to key local entities (including D-Sibs) and expanding the application to regulatory reporting. ING considers BCBS239 principles as part of its continuous improvement initiatives such that the key risk data aggregation and reporting practices align with the BCBS239 principles.

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. The TRIM is expected to be finalised at the end of 2019 and could impact ING through more stringent regulation on internal models as well as increases of 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 either 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 2018, several changes were made to our top and emerging risks. The top risks in 2018 are still related to cybercrime, Brexit negotiations, trade-restrictive measures 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 environment was marked in 2018 by accelerated economic growth in the United States, driven by fiscal stimulus, while it slowed in UK in light of continued uncertainty about the UK's future with the EU. In the Eurozone, the economic momentum slowed but remained strong. Further, trade-restrictive measures were also sources of uncertainty. The persistence of a low interest rate environment in Europe, where central banks held their rates at very low and even negative levels in some countries, negatively impacted short-term as well as long-term market rates. The persistence of both low interest-rate levels and the small difference between short and long-term rates impact ING's net interest income.

The decision of the United Kingdom and EU to agree regarding leave the European Union ('Brexit') remains a major political and economic event that continues to effect sentiment. Brexit negotiations took place throughout 2018 and the year ended without an agreement on how the UK would leave the EU. ING continued to take steps throughout 2018 to prepare for various options, such as applying for a banking licence in the UK, taking actions for contract continuity and working to establish alternatives in the EU for those euro clearing activities that are expected to move from London following Brexit. Economic growth in the UK has slowed against a background of continued uncertainty about the future relationship with the European Union. 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.

Furthermore, pessimism about macro-economic developments such as economic and geo-political situation in Turkey and a looming trade war between the US and China unsettled financial markets and dampened consumer confidence in 2018. The trade-restrictive measures negatively affected the economic growth in some key emerging markets (a.o. China). Further uncertainty about the forthcoming budget in Italy led to a considerable increase in sovereign spreads and potential economic recession. In this perspective, ING continued to carefully monitor international developments.

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 Cyber Crime Expertise and Response Team, further enhancing the control environment to protect, detect and respond to e-banking fraud, DDoS and targeted attacks. Additional controls continue to be embedded in the organisation as part of the overall internal control framework and are continuously reassessed against existing and new threats.

ING also works on strengthening its global cybercrime resilience including strong collaboration against cybercrime with the financial industry, law enforcement authorities, government (e.g. National Cyber Security Center) and Internet Service Providers (ISPs).

Climate change risk

The climate is changing and this is an unparalleled challenge to our world. The causes of climate change are complex but ING understands that it is attributed directly or indirectly to anthropogenic factors. As a financial institution, ING too has a responsibility to address climate-related risks which may affect our clients or ING.
ING can play a role in financing solutions to climate change. In addition to investing billions of euros in wind farms, solar energy and geothermal power production to support the energy transition, ING will not only stop providing lending services to new coal-fired power plants and coal mines but also accelerate the reduction of financing to thermal-coal power generation to close to zero by 2025. Decisions like this have been informed by energy transition risk assessment as well as our own internal climate ambition to steer our portfolio towards the goals of the Paris Agreement.

There are physical risks associated with climate change such as those caused by changes in the frequency of extreme weather and rising sea levels. Climate-related damage resulting from storms, hail and rain may not be insured in many regions and countries of the world where ING or its clients may have business interests. There are also risks inherent to the transition to a low-carbon economy and/or resulting from the implementation of the Paris Accord. These may impact the financial sector as a result of transition policy and technological developments. The market for green finance is also changing, creating new opportunities and threats. ING is working to improve its understanding of physical and transition risks related to climate change. We are increasingly aware of these risks and are taking steps in the right direction. For example, ING already announced plans to achieve "greener" commercial real estate and mortgage portfolios. Another example is the development of the Terra approach, where ING's sector portfolios are compared with relevant climate scenarios to identify gaps and inform strategy, will greatly contribute to this process.

In order to have board-level oversight of strategic climate-related risk and opportunity management, in 2018, ING established the Climate Change Committee (CCC). This executive committee is chaired by ING's CRO and co-chaired by the board member responsible for Wholesale Banking. The CCC governs ING's climate-related risk and opportunity management, strategy and target-setting for the Group.

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

Credit risk is a Tier 1 level risk function within ING and is part of the second line of defence. It is managed within the CRO organisation by regional and/or business unit CROs, focusing on specific risks in the geographical and/or business areas of their responsibilities. These are the CRO Wholesale Banking (WB), CRO Challengers & Growth Markets (C&G), CRO Netherlands and CRO Belgium. The Financial Risk department is a Tier 2 level risk function, which has oversight at a consolidated level and is responsible for risk appetite setting, risk frameworks, model development and policies.

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 analysis at portfolio level is monitored using metrics such as economic capital, regulatory capital, exposure at default (EAD), probability of default (PD) and loss given default (LGD). To target effective use of ING's capital, the risk appetite is monitored and managed at the portfolio level. Credit analysis at the transactional level focuses on the risk amount, tenor, structure of the facility and profile of the borrower. ING's credit risk managers make use of publicly available information, information provided by the client, transaction data of the client via ING account, peer group comparisons, industry comparisons and quantitative techniques.

Within ING, the ultimate approval authority for credit proposals resides with the MBB. The MBB has delegated authorities based on amounts, tenors and risk ratings to lower levels in the organisation. Transactions are approved via a dual signatory approval system that requires an individual sign-off from both front office and credit risk management. For larger and higher risk credits a committee structure exists whereby the credit risk chair takes the final decision with advice from the respective committee members, thereby ensuring accountability. Retail business units have delegated authority to decide within policies and mandates approved by credit risk. Any decisions outside those policies or above the delegated mandate require a specific credit risk approval.

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.

The following committees are in place to review and approve transactions and policies from a credit risk point of view:
- The GCTP is authorised to approve policies, methodologies and procedures related to credit, trading, country and reputation risks on a high level for ING.
- The GCC(TA) is mandated to approve transactions with credit risks.
- The CTRC is authorised to approve policies, models, methodologies and procedures related to credit risk on a more detailed and operational level (with the exception of issues which are mandated to the GCTP).
- The Model Development Committee (MDC) serves as a technical advisor to the CTRC and is a planning body for future model development. The committee has a delegated mandate to approve credit risk models which cover smaller portfolios.
- The Model Risk Management Committee (MoRMC) has been established to align overall model strategy, model risk appetite, supporting model frameworks, policies and methodologies.
- The ING Provisioning Committee (IPC) is the approval authority for loan loss provisions (LLP) for all entities.

Credit risk categories

Credit risk uses the following risk categories to differentiate between the different types of credit risk:
- **Lending risk**: arises when ING grants a loan to a client, or issues guarantees on behalf of a client. This includes term loans, mortgages, revolving credits, overdrafts, guarantees, letters of credit, etc. The risk is measured as the accounting value of the financial obligation that the client has to repay to ING, excluding any accrued and unpaid interest, discount/premium amortisations or impairments.
- **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 worst-case 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. As such, money market deposits tend to be short-term in nature. In the event of a counterparty default, ING may lose the deposit placed. Money market risk is measured as the accounting value of the deposit, excluding any accrued and unpaid interest or the effect of any impairment.
- **Pre-settlement (PS) risk**: arises when a client defaults on a transaction before settlement and ING has to 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 risks including a risk limit structure per borrower. Due to the short term nature (1 day), ING does not hold provisions or capital for specific 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 Annual Accounts
Lending risk	-Cash and balances with central banks -Loans and advances to banks -Loans and advances to customers	Note 2 Cash and balances with central banks Note 3 Loans and advances to banks Note 7 Loans and advances to customers Note 4 Financial assets at fair value through profit or loss Note 5 Financial assets at fair value through other comprehensive income
	-Off-balance sheet items e.g. obligations under financial guarantees and letters of credit and undrawn credit facilities	Note 43 Contingent liabilities and commitments
Investment risk	-Debt securities -Equity securities	Note 4 Financial assets at fair value through profit or loss Note 5 Financial assets at fair value through other comprehensive income Note 6 Securities at amortised cost
Money market (MM) risk	-Cash and balances with central banks -Loans and advances to banks -Loans and advances to customers	Note 2 Cash and balances with central banks Note 3 Loans and advances to banks 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) -Financial liabilities at fair value through profit or loss (trading assets and non-trading derivatives) -Securities financing	Note 4 Financial assets at fair value through profit or loss Note 15 Financial liabilities at fair value through profit or loss
Settlement risk	-Financial assets at fair value through profit or loss (trading assets and non-trading derivatives) -Financial liabilities at fair value through profit or loss (trading assets and non-trading derivatives) -Amounts to be settled	Note 4 Financial assets at fair value through profit or loss Note 11 Other assets Note 15 Financial liabilities at fair value through profit or loss 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 and concentration risk boundaries and instruments are set and reviewed on an annual basis and require approval from the MBB, EB or SB.

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 to ING's credit risk appetite by means of the 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 the 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 SB that 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. By means of instruments, actual country limits are set (each of which should not exceed the country's boundary), reviewed monthly and updated when needed. In the case of countries with elevated levels of geopolitical or severe economic cycle risk, the monitoring is performed on a more frequent basis with strict pipeline and exposure management to protect ING from adverse impacts.
- Single name and industry sector concentration: Using the same concepts of boundaries and instruments mentioned earlier, ING has established a concentration risk framework in order to identify, measure and monitor single name concentration and industry sector concentration (systemic risk).
- Product and secondary risk concentration: In addition, 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 in the Risk Management section, ING performs regularly sensitivity analysis in order to assess portfolio risks and concentrations. These sensitivity analysis are consistent with the stress scenario established in the group wide credit risk appetite framework.
- Product approvals: the product approval and review process is implemented to assess and manage risks associated with the introduction of new or modified products. It safeguards that sound due diligence is performed by relevant stakeholders and to have the relevant risks (credit, operational, compliance, etc.) adequately addressed in the Product Approval and Review Process (PARP).
- Sector policies: being detailed analyses of defined products and/or industries. They identify the major risk drivers and mitigants, the internal business mandate, and propose the minimum 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: being the maximum appetite of credit risk per legal one obligor group. It 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 and can be waived on the basis of proper credit risk arguments.
- 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. 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, should be approved by the global head of retail risk.

Environmental and Social Risk Framework

ING makes a positive contribution to global economic growth and sustainable development by promoting responsible lending and investment practices. The ESR policy framework incorporates assessment tools that are used in ING's mainstream processes and systems. It is therefore fully integrated into regular client and transaction reviews.

The ESR policy framework is reviewed every three years on the basis of significant changes identified in the sectors that are more vulnerable to environmental and social risks and impacts. In 2018, a full review of the ESR policy framework was conducted to achieve more clarity on the scope, governance and due diligence. This was done with the active participation of internal stakeholders (per industry sector) and guidance from external stakeholders (clients, peer banks and NGOs). The updated ESR policy framework is scheduled to be implemented in early Q2 2019, similar to the publication on ing.com.

Environmental and social risks for all lending transactions are reviewed during the periodic credit reviews. ESR transactions, where funds will be used for asset based finance, may require enhanced ESR due diligence e.g. application of the Equator Principles. Such enhanced ESR evaluation is also required for any high-risk transaction, such as those that impact indigenous people etc.

As the risk assessment activities are performed globally, each team involved must be familiar with ING's environmental and social framework. Hence, ING makes a significant investment in internal training programs to help CDUs, front office and risk management staff in assessing environmental and social risks.

Credit risk models

Within ING, internal Basel compliant models are used to determine PD, EAD and 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 both regulatory 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.

Pre-settlement measurement models

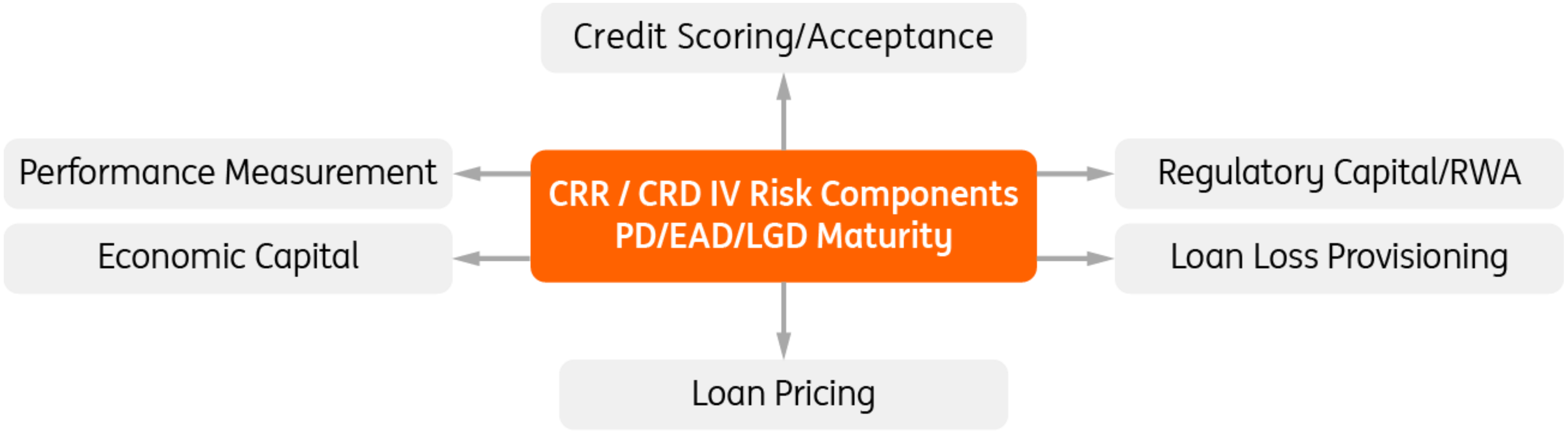
For regulatory capital, pre-settlement (PS) exposure is calculated using a marked to market (MtM) plus regulatory-based add-on. For internal capital purposes ING uses a combination of the below mentioned methodologies to calculate its PS exposures:

- **MtM plus model based add-on approach**: In this approach, the PS risk is calculated as the sum of the MtM of the trade and a model-based add-on. The MtM fluctuates through the life of the contract. The model-based add-on is product-specific, and takes into account the remaining time to maturity, profiling per time-buckets etc. Add-ons are updated with a frequency that takes into account major market changes. This methodology is used for pre-deal exposure assessment of all ING financial markets products. Furthermore, it is used for post-deal risk calculations in the case of financial markets portfolios that do not justify the computational efforts and costs associated with implementation of a Scenario Simulation approach;
- **Scenario Simulation approach (Monte Carlo approach)**: This approach is the more complex of the methods for PS risk calculations. It takes into account daily market conditions, including correlations between the risk factors and portfolio benefits. This Monte Carlo approach is currently used in ING for the largest volume of derivative products such as foreign exchange (FX) and interest rate derivatives.

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.

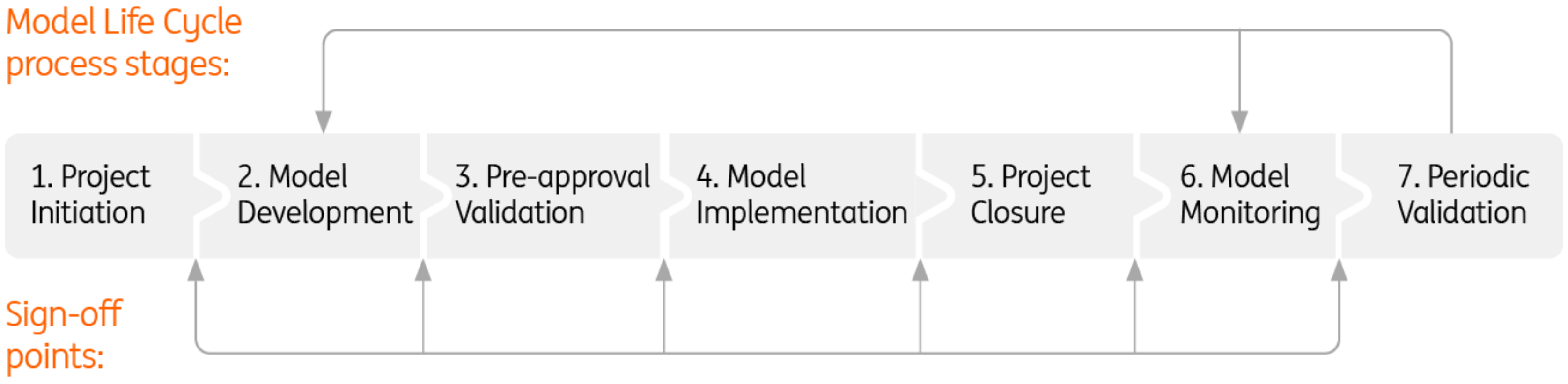
There are no exposures under the advanced, Internal Model Method (IMM) under Pillar 1. Under Pillar 2 ING uses the IMM for FX and interest rate derivative exposures.

The figure below provides a high level summary of the application of model outcomes (PD, EAD and LGD).



Credit risk model governance

All PD, EAD and LGD models used for regulatory capital and for IFRS loan loss provisioning are built according to ING's internal credit risk modelling methodology standards and model life cycle. After a model validation by Model Risk Management (MoRM), the Model Development Committee (MDC) advices the Credit & Trading Risk Committee (CTRC) on the final approval of the models. The model validation is focused on the following four key elements: process verification, conceptual soundness, outcome analysis and review of developmental evidence.. Each model has both a credit risk and a front office co-sponsor. Both the MDC and the CTRC have participation from senior credit risk management as well as the front office to ensure maximum alignment within the organisation. The capital impact from the implementation of approved models is reported to the ECB in a quarterly report. In addition, MoRM validates each model on a periodic basis. During such periodic validation, the model performance is analysed through back-testing and performance assessment. A five-grade colour footprint is assigned to each model during this time. If a model is considered insufficiently robust or if the back-testing indicates insufficient performance, then the model is re-calibrated or re-developed.



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 same 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 which 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 and reviewed, at least annually with the performance of the underlying models monitored regularly. Over 90% 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. While other models are more regional or country specific, such as 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 or bi-monthly basis. Models for large corporates, institutions and banks are manually updated and are individually monitored on at least an annual basis.

IFRS 9 models

The IFRS 9 models determine expected credit loss (ECL) based on which collective loan loss provisions are determined. The IFRS 9 models leverage on the AIRB models (PD, LGD, EAD). For this purpose, regulatory conservatism is removed from the ECL parameters (PD, LGD and EAD). The IFRS 9 models apply two types of adjustments to the ECL parameters, namely 1) adjustment for economic outlook and 2) adjustment for lifetime horizon, the latter which is only applicable for stage 2 and stage 3 assets. The IFRS9 model parameters are estimated based on statistical techniques and supported by expert judgement.

Credit risk tools

Credit risk policies

ING's credit risk policies outline the rules, roles and responsibilities, through the credit lifecycle. All credit risk policies are created according to policy development standards and reviewed on a regular basis. Each policy has a credit risk sponsor and is created in close consultation with various stakeholders within credit risk, front office and, where applicable, other corporate departments. All policies require approval by the CTRC and, where applicable, by the GCTP.

Credit risk systems and data standards

The acceptance, maintenance, measurement, management and reporting of credit risks at all levels of ING is executed through promotion of single, common credit risk data standards and the integration into common 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 which are active throughout the group. Application to these three areas is the essential requirement to aim for high data quality standards and discipline. The customer-centric data model conforms to the three core business needs of ING:
- To transact efficiently with our clients;
- To be compliant with our internal and external obligations; and
- To monitor the risks we undertake.

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). In the Financial Risk and Risk COO departments, these principles are embedded in credit risk data management and enshrined within the Data Governance framework. The framework outlines roles and responsibilities relevant for the credit risk lifecycle and data quality assurance.

Credit risk data lifecycle

The credit risk data governance framework used by ING is based on the credit risk data lifecycle. The governance related to data delivery and exchange is described in various data agreements between data users and data suppliers.
The scope of credit risk data is the data set determined and assigned for ING's external and internal reporting requirements as well as our credit risk modelling requirements. Principally, data can be categorised into one of the two following types:
- **Atomic data**: the lowest level of detail and provides the base data for all data transformations. The guiding principles are that each data element is only input once, and has a clear data owner and 'home' system or database which is leading throughout all uses of that data element. From the data 'home', the data may then be redistributed to other systems or databases that may require that data in an automated Straight through Processing (STP) method. Depending on the need, the data may be transferred in real time, near real time, daily, weekly or monthly.
- **Derived data**: data derived from other data elements (atomic or derived) as a result of data transformations such as credit risk models, calculations and aggregation. Derived data is hosted in the central credit risk system (Vortex).

A key component of credit risk data is that this data is continuously used throughout all the stages of the credit risk management cycle. By using and re-using data, there is a continuous incentive for all data providers and users to assure high standard data quality with regards to data delivery and data usage.

The credit risk data lifecycle describes the interlinked stages of the lifecycle from data definition to data usage as shown in the next figure:

- **Data Definitions**: this process step aims that atomic and derived credit risk data terms have a single definition and definition owner throughout the organisation. It also facilitates that defined data is fit for the purpose it will be used for.
- **Capture**: aims that atomic data is captured by business units and is available for exchange according to pre-agreed standards and specifications.
- **Exchange**: purpose of this step is that data exchange is executed as agreed between data owner and data user.
- **Processing & Calculation**: processes delivered atomic data and uses it to calculate credit risk derived data. The outcome of this stage is used as an input for credit risk data aggregation in, for example, risk reporting.
- **Data Usage**: facilitates data aggregation and usage such that it is fit for multiple purposes e.g. modelling, regulatory and statutory reporting. Data usage or distribution is facilitated according to the agreed purpose and data confidentiality, protection, security and retention rules.

- **Data Quality Assurance**: establishes data quality management with the primary focus on how credit risk data quality is managed throughout the credit risk data lifecycle. It covers the data quality cycle, data quality criteria and relevant activities through the stages.

The data quality cycle consists of four stages: define, implement, monitor and improve. During the data definitions step, data quality rules are determined. Having set the definitions, local data quality rules are implemented in the source systems, and both successively and simultaneously, data quality rules are implemented in the central credit risk system. The next stage consists of data validations, monitoring and control activities performed early in the data exchange and after data processing and calculation stage. The last stage is the continuous improvement of data quality which can be split into two categories:

- One-off issues and reoccurring issues that are identified, prioritised and subject to resolution;
- The periodic review of data quality rules and improvements based on lessons learned from solving issues, audits and best practices.

Credit risk portfolio

ING's credit exposure is mainly related to traditional 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 can 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 or equivalent entities, followed by 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 exposures which arise from trading activities, including derivatives, repurchase transactions and securities lending/borrowing transactions. This is also identified as counterparty credit risk.

Unless specifically stated, the figures in the tables in the credit risk section includes 'intercompany loans' to ING Group.

Portfolio analysis per business line

Risk rating buckets are defined based upon the quality of the exposures in terms of creditworthiness, varying from investment grade to non-performing loan ratings expressed in S&P, Moody's and Fitch rating equivalents.

ING uses a common industry classification methodology based on the NAICS system (North American Industry Classification System). This methodology has over 1,500 detailed industry descriptions, which are aggregated into 22 industry classes at the highest level. Certain countries require ING to report locally based on other industry classification methodologies, which are generally derived from the NAICS classifications presented here.

ING Bank portfolio per line of business, outstandings[1,2,3,4,5]

		Wholesale Banking		Retail Benelux		Retail Challengers & Growth Markets		Corporate Line		Total	
Rating class		2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Investment grade	1 (AAA)	25,179	20,110	466	482	16,390	14,803	29,333	6,842	71,368	42,237
	2-4 (AA)	46,819	38,304	5,572	6,971	28,515	32,749	1,431	12	82,337	78,036
	5-7 (A)	63,797	68,028	19,643	18,391	41,325	39,690	531	567	125,296	126,676
	8-10 (BBB)	110,876	92,240	109,843	95,260	56,520	56,567	2,655	3,168	279,894	247,235
Non-Investment grade	11-13 (BB)	93,299	92,305	66,887	77,868	42,968	40,104	957	982	204,111	211,259
	14-16 (B)	18,684	17,429	16,444	15,939	11,904	11,351	13		47,045	44,719
	17 (CCC)	1,696	1,786	2,324	2,577	760	758	90	5	4,870	5,126
Substandard grade	18 (CC)	1,444	1,546	1,491	1,599	600	341			3,535	3,486
	19 (C)	299	553	1,093	1,237	629	563			2,021	2,353
NPL grade	20-22 (D)	4,396	5,415	4,229	4,678	2,189	2,107	314	308	11,128	12,509
Total		**366,489**	**337,716**	**227,992**	**225,002**	**201,800**	**199,033**	**35,324**	**11,885**	**831,605**	**773,636**
Industry											
Private Individuals		32	37	164,220	163,426	156,385	146,450			320,637	309,913
Commercial Banks		45,094	49,538	251	315	8,889	9,579	4,263	4,766	58,497	64,199
Natural Resources		52,498	52,666	1,151	872	863	1,132			54,512	54,670
Real Estate		38,481	36,180	12,219	11,552	2,353	1,972			53,053	49,704
Central Governments		32,356	29,699	1,306	2,481	6,244	9,207	3,131	3,131	43,037	44,518
Non-Bank Financial Institutions		37,023	32,623	2,139	2,289	623	2,427	762	769	40,547	38,108
Transportation & Logistics		27,036	24,462	2,699	2,661	741	770			30,476	27,893
Central Banks		28,962	17,014		199	6,124	2,672	27,116	3,214	62,202	23,099
Services		12,470	12,410	9,911	8,939	980	1,099	2		23,363	22,448
Food, Beverages & Personal Care		15,093	12,871	5,600	4,915	2,258	2,555			22,951	20,341
Lower Public Administration		3,459	3,613	5,296	4,959	8,227	11,706			16,982	20,278
General Industries		14,919	13,393	3,932	3,571	2,681	2,896			21,532	19,860
Chemicals, Health & Pharmaceuticals		10,248	8,399	6,253	6,246	1,070	1,264			17,571	15,909
Other		48,818	44,811	13,015	12,577	4,362	5,304	50	5	66,245	62,697
Total		**366,489**	**337,716**	**227,992**	**225,002**	**201,800**	**199,033**	**35,324**	**11,885**	**831,605**	**773,636**

ING Bank portfolio per line of business, outstandings[1,2,3,4,5] - continued

		Wholesale Banking		Retail Benelux		Retail Challengers & Growth Markets		Corporate Line		Total	
Region		2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Europe	Netherlands	41,816	43,041	142,602	142,960	656	722	30,158	7,659	215,232	194,382
	Germany	15,831	16,869	475	476	96,278	93,552	45	38	112,629	110,935
	Belgium	36,546	22,419	79,362	76,396	671	667	16		116,595	99,482
	Rest of Europe [4]	149,499	143,897	5,083	4,735	66,900	66,706	1,516	77	222,998	215,415
Americas		64,621	56,086	294	222	1,572	2,549	15	1	66,502	58,858
Asia/Pacific		48,557	47,589	105	139	194	138	3,573	4,104	52,429	51,970
Australia		6,751	4,994	28	29	35,524	34,696	1	6	42,304	39,725
Rest of World		2,868	2,821	43	45	5	3			2,916	2,869
Total		**366,489**	**337,716**	**227,992**	**225,002**	**201,800**	**199,033**	**35,324**	**11,885**	**831,605**	**773,636**

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.
4 The top 5 countries within Rest of Europe based on outstandings are Poland (EUR 32,244 million), Spain (EUR 30,156 million), United Kingdom (EUR 28,610 million), Luxemburg (EUR 23,540 million) and Italy (EUR 19,948 million).
5 For a reference to the Notes in the Annual Report we refer to the table 'Reconciliation between credit risk categories and financial position'.

During 2018, the total ING portfolio size increased by 7.5% to EUR 832 billion outstandings, mainly driven by net volume growth and by foreign exchange rate changes. The net volume growth was mainly visible in risk categories Lending (+8.9%) and Pre-Settlement (+15.5%), partially offset by a reduced outstandings in Investment (-5.6%). The increase related to foreign exchange rate movements was mostly due to the appreciation of US Dollar (+5.0%) against the Euro, which was largely offset by the depreciation of the Australian Dollar (-5.4%), New Turkish Lira (-25.1%) and Polish New Zloty (-2.8%) against the Euro.

Overall the rating class concentration improved. Increased outstandings was observed for Investment grade rating classes (+13.1%), while the concentration in Non-Investment and Substandard grade decreased by 1.9% and 4.8%, respectively.
The NPL grade rating class decreased outstandings by 11.1%, mainly driven by Wholesale Banking and Retail Benelux. The NPL decrease in WB was largely visible in the industries Natural Resources, Real Estate, Transportation & Logistics and Utilities, partially offset by an increased NPL outstandings in Food, Beverages & Personal Care. The NPL decrease in Retail Benelux was mainly seen for residential mortgage loans. The overall exposure for ING remained concentrated in the A, BB and BBB rating classes.

Outstandings on AAA-rated assets increased by 69%, mainly due to increased central bank exposures in Corporate Line as a result of liquidity management.

Central bank exposure within Europe and Americas increased across business lines contributing to the growth observed in AAA/AA rated assets. The concentration in the BBB rating class for Wholesale Banking increased largely driven by an increased outstandings to corporates and a downgrade for one German financial institution shifting exposure from rating class A to BBB.

Additional decreased outstandings in rating class A within Wholesale Banking was seen with corporates.

The rating distribution for Retail Benelux improved mostly driven by improved risk profile of Dutch residential mortgages shifting outstandings from rating classes BB to BBB. Similar but smaller in volume shift from rating classes BB to BBB was seen with residential mortgages in Belgium. The overall volume growth of Belgium residential mortgages was mainly concentrated in rating class BBB. Further positive risk migration in Retail Benelux was due to decreased defaulted exposures (-9.6%), mostly driven by the reduced defaulted exposures in Netherlands Retail (-18.7%). A reduction of AA outstandings for Retail Challengers & Growth Markets (C&G) was seen mainly in Germany, caused largely by lowered volumes of bond investments and money market assets with Local / Regional Authorities. BB rating class increased outstandings in Retail Challengers & Growth Markets (C&G) mainly in Residential Mortgage Loans with the largest growth seen in Australia and Spain.

The main concentration in Private Individuals is related to mortgage lending. Mortgage volume increased, mainly in Germany, Spain, Belgium and Poland, which was partially offset by a decline of mortgage lending in the Netherlands. Overall the main contributor for the increased outstandings in Private Individuals was Retail Challengers & Growth Markets.

The outstandings concentration with Central Governments decreased following a reduction in government bond exposures to Germany, France and Austria within Wholesale Banking and Retail Challengers & Growth Markets. This was partially offset by an increase in government bond exposures with Spain, USA and Poland. In Retail Benelux a decrease of central government exposures was seen in Belgium.

Within Central Banks, the increase in concentration in Corporate Line was solely driven by increased deposits with the Dutch central bank, while in Wholesale Banking increased outstandings was seen with Banque Nationale de Belgique SA, partially offset by a reduction in exposures with Banque Centrale du Luxembourg and Bank of England. An increase was also seen with regulatory reserve deposits with Deutsche Bundesbank within Retail Challengers & Growth Markets.

Commercial Banks concentration decreased within Wholesale Banking, largely due to decreased Nostro / Loro exposures in the Netherlands and decreased export finance in China, which was partially offset by increased trade finance in Republic of Korea. Non-Bank Financial Institutions concentration increased in Wholesale Banking mostly due to increased securities financing in the USA, while reduced concentration in Retail Challengers & Growth Markets was mainly due to lower securitization exposures in United States and Spain.

Within Wholesale Banking: Real Estate concentration increased mainly due to increased lending exposures in United States, Luxemburg and Australia; Transportation & Logistics outstandingsg increased mostly in Japan; Food, Beverages & Personal Care outstandings increased mainly in United States, Switzerland and Luxembourg; Chemicals, Health & Pharmaceuticals outstandings increased mostly in Germany and United States, while a decreased outstandings was seen in the Netherlands.

A reduced concentration of Lower public administration was seen within Retail Challengers & Growth Markets, driven by the reduction of bond investments with Local / Regional Authorities in Germany.

Portfolio analysis per geographical area

The most noticeable outstandings trends in the Netherlands were the aforementioned decreased volumes in residential mortgage loans and decreased Nostro / Loro exposures to Commercial Banks. These were completely offset by the large increase in regulatory reserve deposit with the Dutch Central Bank.

Increased outstandings in Belgium was mainly due to increased Securities Financing and Money Market Assets with Central Bank and due to residential mortgage volume growth. These were slightly offset by a reduction of exposure with Belgian Central Government.

Outstandings in Germany increased mainly due to increased regulatory reserve deposits with Deutsche Bundesbank and increased residential mortgage lending, which was partly offset by lowered volumes of bond investments and money market assets with Local / Regional Authorities.

The concentration of outstandings in the Rest of Europe increased, mainly in Spain, Poland and Romania, while it decreased in France and Turkey. The increase of outstandings in the Americas was largely driven by higher exposures to Corporates and Non-Bank Financial Institutions in the United States. In Asia/Pacific, the concentration of outstandings remained relatively stable, with noticeable increase of outstandings in Hong Kong, Republic of Korea, Singapore and Japan, partly offset by a reduction of outstandings in China and Taiwan.

ING Bank portfolio, outstandings by economic sectors and geographical area[1,2]

	Region								Total	Total
Industry	Netherlands	Belgium	Germany	Rest of Europe	Australia	Asia	America	Africa	2018	2017
Private Individuals	118,115	42,174	81,448	47,359	31,109	178	215	39	320,637	309,913
Commercial Banks	3,780	340	3,899	26,453	1,680	14,998	6,907	440	58,497	64,198
Natural Resources	2,186	1,348	778	24,308	940	14,665	9,205	1,082	54,512	54,670
Real Estate	18,659	9,689	1,201	16,385	2,912	969	3,227	11	53,053	49,704
Central Governments	7,772	6,127	2,769	19,128	374	232	6,304	331	43,037	44,518
Non-Bank Financial Institutions	3,615	1,351	2,539	16,150	625	3,235	13,029	3	40,547	38,108
Transportation & Logistics	4,207	2,063	446	11,710	811	7,101	3,499	639	30,476	27,893
Central Banks	25,721	18,343	5,690	9,174	226	3,041		7	62,202	23,099
Services	4,707	8,815	877	5,439	321	824	2,380		23,363	22,448
Food, Beverages & Personal Care	5,640	3,234	390	8,281	84	1,211	4,098	13	22,951	20,341
Lower Public Administration	523	5,544	6,566	1,808	1,619		922		16,982	20,278
General Industries	4,222	3,293	1,125	7,996	6	1,576	3,314		21,532	19,860
Chemicals, Health & Pharmaceuticals	4,341	3,410	1,109	5,042	147	541	2,981		17,571	15,909
Other	11,744	10,864	3,792	23,765	1,450	3,858	10,421	351	66,245	62,697
Total	**215,232**	**116,595**	**112,629**	**222,998**	**42,304**	**52,429**	**66,502**	**2,916**	**831,605**	**773,636**
Rating class										
Investment grade	141,831	75,537	90,159	146,834	27,734	36,677	39,937	185	558,894	494,183
Non-Investment grade	68,568	37,484	21,268	71,260	14,125	15,330	25,463	2,528	256,026	261,105
Substandard grade	1,705	1,137	454	1,652	57	184	314	53	5,556	5,838
NPL grade	3,128	2,437	748	3,252	388	238	788	150	11,129	12,510
Total	**215,232**	**116,595**	**112,629**	**222,998**	**42,304**	**52,429**	**66,502**	**2,916**	**831,605**	**773,636**

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.
2 For a reference to the Notes in the Annual Report we refer to the table 'Reconciliation between credit risk categories and financial position'.

Credit risk mitigation

ING's lending and investment businesses are subject to credit risk. As such, the creditworthiness of our customers and investments is continually monitored for their ability to meet their financial obligations to ING. In addition, to determine the credit quality and creditworthiness of the customer, 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 an event of default on an obligation a customer may have towards ING. The most common terminology used in ING for credit risk protection is 'cover'. While a cover can 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. Within ING, there are two distinct forms of covers: assets and third party obligations.

Cover forms

Assets

The asset that has been pledged to ING as collateral or security gives ING the right to liquidate it in cases where 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 outstandings exposure. An asset can be tangible (such as cash, securities, receivables, inventory, plant & machinery and mortgages on real estate properties) or intangible (such as patents, trademarks, contract rights and licenses).

Third party obligation

Third party obligation, indemnification or undertaking (either by contract and/or by law) is a legally binding declaration by a third party that gives ING the right to claim from that third party an amount, if the customer fails on its obligations to ING. 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 have consistent application within ING. These general guidelines also require that the value of the cover needs to be 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 covers.

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, 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 which is attributed to the contract between ING and that third party.

Covers

This section provides insight in the types of covers and to which extent exposures benefit from collateral or guarantees. The disclosure differentiates between the risk categories (Lending, Investment, Money Market and Pre-settlement) and the most relevant cover forms mortgages and financial collateral (cash and securities) and guarantees. ING obtains cover which is eligible for credit risk mitigation under CRR/CRDIV, as well as cover is not eligible. Collateral covering financial market transactions is valued on a daily basis. 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. The non-performing definition is explained in detail in the section 'Credit Restructuring'. To further the insight, also a breakdown of ING's portfolio by industry and geography is provided. For comparability reasons with previous tables, outstandings is used to show ING's portfolio.

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 exposures or a particular outstandings of a borrower, the latter being the most common. For the purpose of aggregation, the coverage of all outstandings is capped at 100%. Over-collateralisation is ignored in this overview for the VTL. Each limit 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%. As the nature of the Pre-settlement portfolio determines that collateral is netted, these VTL buckets are not shown.

The next table gives an overview of the collateralisation of the ING's total portfolio.

Cover values including guarantees received – Total ING Bank - 2018

		Cover type					Value to Loan		
	Outstan-dings	Mortgages	Eligible Financial Collateral	Other CRR/CRDIV eligible	Guaran-tees	Non CRR/CRD IV eligible	No Cover	Partially covered	Fully covered
Consumer Lending	318,804	547,832	3,509	280	25,760	39,166	6.6%	7.9%	85.4%
Business Lending	365,480	147,203	19,089	125,472	86,215	132,416	37.7%	23.5%	38.8%
Investment and Money Market	95,701		80	214	145	45	91.0%	8.8%	0.2%
Total Lending, Investment and Money Market	**779,985**	**695,035**	**22,678**	**125,966**	**112,120**	**171,627**	**31.6%**	**15.3%**	**53.1%**
Pre-settlement [1]	51,620								
Total Bank	**831,605**								

1 More information on the credit risk mitigants can be found in the Pre-settlement section.

Cover values including guarantees received – Total ING Bank - 2017

		Cover type					Value to Loan		
	Outstan-dings	Mortgages	Eligible Financial Collateral	Other CRR/CRDIV eligible	Guaran-tees	Non CRR/CRD IV eligible	No Cover	Partially covered	Fully covered
Consumer Lending	308,349	512,709	3,680	338	25,130	38,551	6.3%	9.3%	84.4%
Business Lending	320,153	134,667	15,185	99,569	90,777	128,985	35.3%	24.1%	40.6%
Investment and Money Market	100,449		59	117	522		99.5%	0.4%	0.2%
Total Lending, Investment and Money Market	**728,951**	**647,376**	**18,923**	**100,024**	**116,429**	**167,536**	**31.9%**	**14.6%**	**53.6%**
Pre-settlement [1]	44,685								
Total Bank	**773,636**								

1 More information on the credit risk mitigants can be found in the Pre-settlement section.

Over the year, the collateralisation level of the total portfolio remained stable. Excluding the pre-settlement portfolio, 53.1% of ING Bank's outstandings were fully collateralised in 2018 (2017: 53.6%). Since investments traditionally do not require covers, the percentage for 'no covers' in this portfolio is close to 90%. Improved economic conditions in ING's main markets contributed to improved collateral valuations, observed in consumer lending, but an increase in non-lending outstandings produced a slightly lower coverage ratio for business lending. The increase in lending for 'Other CRR/CRDIV eligible' covers was mainly situated in the Netherlands, accounting for 43.1% of the difference from 2017. The decrease in 'Guarantees' is primarily attributed to the 'Rest of Europe' region, accounting for 81.1% of the decline.

Consumer lending portfolio
The consumer lending portfolio accounts for 38.3% of ING Bank's total outstandings, primarily consisting of residential mortgage loans (98.5% of performing 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. on a quarterly basis the mortgage values for the Netherlands are updated using the NVM house price index).

A significant part of ING's residential mortgage portfolio is provided in the Netherlands (39.5%), followed by other main markets such as Germany (24.8%), Belgium & Luxembourg (13.5%) and Australia (10.6%). 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% (in 2017: 101%). The cover values are captured in the local systems which are subsequently fed into a central data system.
In case of newly built houses mostly the building /purchase agreement is sufficient as valuation. In the case of existing houses three kind of valuations are allowed. If the LTMV is below 90% a (1) WOZ (fiscal market value, determined by government authorities) or an (2) automated model valuation (the Calcasa ING Valuation) is permitted. In most cases a valuation is performed by (3) certified valuators that are registered at one of the organisations accepted by ING. In addition, the valuator 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 - 2018

		Cover type						Value to Loan					
	Outstandings	Mortgages	Eligible Financial Colla-teral	Other CRR/CRD IV eligible	Guaran-tees	Non CRR/CRD IV eligible	No Cover	>0% - 25%	>25%-50%	>50% - 75%	>75% - <100%	≥ 100%
Performing												
Residential Mortgages (Private Individuals)	285,976	535,664	2,839	96	23,741	33,350			0.1%	1.0%	7.3%	91.6%
Residential Mortgages (SME) [1]	5,383	8,219	160	64	155	1,175		0.3%	0.8%	1.7%	7.5%	89.7%
Other Consumer Lending	23,937	156	493	107	1,694	3,965	84.7%	0.3%	0.1%	0.1%	0.5%	14.3%
Total Performing	**315,297**	**544,039**	**3,492**	**268**	**25,591**	**38,489**	**6.4%**	**0.1%**	**0.1%**	**0.9%**	**6.8%**	**85.7%**
Non-performing												
Residential Mortgages (Private Individuals)	2,490	3,568	16	2	152	605	0.5%	0.2%	0.8%	2.9%	13.6%	82.0%
Residential Mortgages (SME) [1]	134	218		5	9	24	0.4%		0.7%	2.4%	8.9%	87.7%
Other Consumer Lending	884	7	1	5	9	47	95.4%	0.5%	0.1%	0.2%	0.6%	3.2%
Total Non-performing	**3,508**	**3,793**	**17**	**12**	**169**	**677**	**24.4%**	**0.2%**	**0.6%**	**2.2%**	**10.1%**	**62.4%**
Total Consumer Lending	**318,804**	**547,832**	**3,509**	**280**	**25,760**	**39,166**	**6.6%**	**0.1%**	**0.1%**	**1.0%**	**6.9%**	**85.4%**

1 Consists mainly of residential mortgages to small one man business clients

Cover values including guarantees received – Consumer lending portfolio - 2017

		Cover type						Value to Loan					
	Outstandings	Mortgages	Eligible Financial Colla-teral	Other CRR/CRD IV eligible	Guaran-tees	Non CRR/CRD IV eligible	No Cover	>0% - 25%	>25%-50%	>50% - 75%	>75% - <100%	≥ 100%
Performing												
Residential Mortgages (Private Individuals)	277,776	500,753	2,980	116	23,597	32,104			0.1%	1.2%	8.5%	90.2%
Residential Mortgages (SME) [1]	4,882	7,411	68	67	155	1,342		0.4%	1.2%	1.6%	7.7%	89.1%
Other Consumer Lending	21,791	246	604	142	1,147	4,384	84.6%	0.3%	0.1%	0.2%	0.7%	14.1%
Total Performing	**304,449**	**508,409**	**3,652**	**325**	**24,900**	**37,830**	**6.1%**	**0.1%**	**0.1%**	**1.1%**	**7.9%**	**84.7%**
Non-performing												
Residential Mortgages (Private Individuals)	2,883	4,046	26	4	211	646	0.8%	0.2%	0.6%	4.1%	18.9%	75.4%
Residential Mortgages (SME) [1]	159	249		5	10	21	0.7%	1.9%	0.6%	1.8%	10.7%	84.2%
Other Consumer Lending	857	6	1	4	9	53	95.6%	0.3%	0.1%	0.2%	0.7%	3.0%
Total Non-performing	**3,900**	**4,300**	**27**	**13**	**230**	**720**	**21.6%**	**0.3%**	**0.5%**	**3.1%**	**14.6%**	**59.9%**
Total Consumer Lending	**308,349**	**512,709**	**3,680**	**338**	**25,130**	**38,551**	**6.3%**	**0.1%**	**0.1%**	**1.1%**	**8.0%**	**84.4%**

1 Consists mainly of residential mortgages to small one man business clients

The collateralisation of the consumer lending portfolio continued to improve over the year 2018. The rise in collateralisation levels (1.0%) was due to improved housing prices observed in different mortgage markets, driven by the Netherlands as the main market.

ING Bank's residential mortgage outstandings increased mainly in Germany (5.0%), Spain (15.3%) and Belgium (5.6%). The largest contributor to increased mortgage outstandings among performing loans was residential mortgages to private individuals (3.0%). Mortgage outstandings in the Netherlands decreased slightly (-1.4%) due in part to the run-off and transfer of WU Bank mortgages to NN Bank. Overall NPLs have shown an improvement, falling 10.1% from EUR 3.9 billion to EUR 3.5 billion. A considerable portion of this decline in NPLs is observable in the Netherlands.

For the residential mortgages portfolio, the cover type guarantees relates 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 43.9% of ING Bank's total outstandings (41.4% in 2017). 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 – 2018

		Cover type					Value to Loan					
Industry	Outstandings	Mortgages	Eligible Financial Collateral	Other CRR/CRD IV eligible	Guarantees	Non CRR/CRD IV eligible	No Cover	>0% - 25%	>25%-50%	>50% - 75%	>75% - <100%	≥ 100%
Natural Resources	52,774	1,170	2,142	20,718	17,944	17,648	28.2%	11.6%	11.4%	10.7%	12.4%	25.7%
Real Estate	52,438	93,179	1,498	1,823	7,399	9,172	4.3%	1.2%	2.2%	3.1%	7.6%	81.6%
Central Banks	34,366		6				100.0%					
Transportation & Logistics	28,976	3,085	148	25,068	7,470	5,787	17.7%	6.1%	3.0%	4.5%	10.3%	58.5%
Commercial Banks	23,908	323	338	2,848	1,312	1,070	79.1%	2.3%	1.7%	0.3%	6.2%	10.4%
Services	22,248	9,379	2,889	5,802	7,480	15,631	34.2%	4.6%	4.2%	6.7%	5.7%	44.5%
Non-Bank Financial Institutions	20,806	1,581	9,163	20,788	5,529	11,558	33.7%	5.8%	3.1%	9.2%	7.0%	41.2%
Food, Beverages & Personal Care	20,999	7,376	302	8,842	7,380	15,257	29.1%	4.7%	6.8%	9.9%	11.5%	38.0%
General Industries	20,344	5,027	263	16,684	6,065	14,919	33.4%	5.7%	3.7%	8.4%	8.4%	40.4%
Chemicals, Health & Pharmaceuticals	16,439	8,634	203	4,364	3,899	6,485	35.7%	2.8%	3.8%	7.4%	12.0%	38.4%
Builders & Contractors	14,841	7,132	205	5,021	4,370	8,719	27.5%	8.5%	4.2%	8.1%	10.5%	41.1%
Utilities	14,442	376	616	3,529	3,447	4,426	43.0%	16.2%	4.1%	5.7%	3.8%	27.2%
Others [1]	57,741	17,073	1,520	15,007	18,289	30,463	39.4%	5.3%	4.9%	5.5%	8.5%	36.3%
Total Business Lending	**365,480**	**147,203**	**19,089**	**125,472**	**86,215**	**132,416**	**37.7%**	**5.3%**	**4.4%**	**5.8%**	**8.0%**	**38.8%**
of which Total Non-performing	***7,543***	***3,578***	***266***	***2,350***	***2,676***	***2,097***	***28.8%***	***3.8%***	***4.8%***	***9.0%***	***15.1%***	***38.4%***

1 'Others' comprises industries with outstandings lower than EUR 10 billion.

Cover values including guarantees received - Business lending portfolio – 2018

Region		Outstandings	Cover type: Mortgages	Eligible Financial Collateral	Other CRR/CRD IV eligible	Guarantees	Non CRR/CRD IV eligible	Value to Loan: No Cover	>0% - 25%	>25%-50%	>50% - 75%	>75% - <100%	≥ 100%
Africa		2,830	10	62	752	2,043	173	17.1%	4.6%	8.8%	9.9%	25.7%	33.8%
America		47,056	6,105	6,408	29,963	7,007	9,876	39.9%	5.6%	6.0%	6.8%	8.8%	32.9%
Asia		41,943	868	1,153	14,466	14,391	8,865	39.7%	7.0%	5.3%	7.5%	9.2%	31.4%
Australia		7,741	6,074	226	1,182	939	783	33.6%	3.4%	1.7%	3.7%	6.2%	51.3%
Europe	Belgium	49,464	34,299	990	8,567	18,601	36,642	25.0%	1.9%	3.1%	4.1%	6.3%	59.5%
	Germany	15,167	2,288	71	669	1,366	3,395	62.6%	5.0%	2.5%	4.4%	2.4%	23.2%
	Netherlands	84,664	56,558	2,976	35,393	7,553	13,955	43.5%	2.3%	2.7%	5.5%	9.7%	36.3%
	Rest of Europe	116,614	40,999	7,204	34,481	34,316	58,726	34.9%	8.3%	5.7%	5.8%	7.2%	38.1%
Total Business Lending		**365,480**	**147,203**	**19,089**	**125,472**	**86,215**	**132,416**	**37.7%**	**5.3%**	**4.4%**	**5.8%**	**8.0%**	**38.8%**
of which Non-performing		***7,543***	***3,578***	***266***	***2,350***	***2,676***	***2,097***	***28.8%***	***3.8%***	***4.8%***	***9.0%***	***15.1%***	***38.4%***

Cover values including guarantees received - Business lending portfolio – 2017

		Cover type					Value to Loan					
Industry	Outstandings	Mortgages	Eligible Financial Collateral	Other CRR/CRD IV eligible	Guarantees	Non CRR/CRD IV eligible	No Cover	>0% - 25%	>25%-50%	>50% - 75%	>75% - <100%	≥ 100%
Natural Resources	50,754	1,090	2,359	20,529	16,162	18,501	32.6%	12.4%	10.5%	10.7%	9.2%	24.6%
Real Estate	49,098	81,749	1,641	1,363	7,179	8,084	6.4%	1.1%	0.9%	3.2%	9.3%	79.2%
Transportation & Logistics	26,352	3,151	139	21,428	6,983	7,734	19.2%	5.0%	1.3%	4.5%	12.9%	57.2%
Commercial Banks	26,265	324	126	2,370	1,624	746	86.2%	1.1%	0.2%	1.0%	2.3%	9.1%
Services	21,369	8,747	2,800	4,318	7,148	12,315	34.8%	4.0%	4.2%	5.8%	9.1%	42.1%
Food, Beverages & Personal Care	18,739	7,170	269	7,791	7,529	15,287	26.2%	4.2%	5.2%	10.7%	11.6%	42.1%
General Industries	18,711	4,676	210	6,529	6,152	12,169	36.9%	3.4%	6.0%	7.7%	8.5%	37.5%
Non-Bank Financial Institutions	17,394	1,774	5,362	13,018	5,070	10,255	36.4%	6.2%	5.0%	8.9%	2.6%	41.0%
Chemicals, Health & Pharmaceuticals	14,905	8,159	240	3,381	3,171	7,239	36.3%	2.6%	3.3%	7.6%	12.1%	38.0%
Builders & Contractors	14,242	6,517	230	4,789	4,535	7,886	35.4%	4.2%	5.0%	6.0%	8.9%	40.4%
Utilities	13,503	777	911	4,134	3,920	6,325	39.7%	8.7%	3.3%	4.8%	6.4%	37.1%
Others [1]	48,821	10,534	899	9,918	21,302	22,444	49.7%	5.3%	4.4%	4.4%	8.3%	27.9%
Total Business Lending	**320,153**	**134,667**	**15,185**	**99,569**	**90,777**	**128,985**	**35.3%**	**5.2%**	**4.3%**	**6.1%**	**8.6%**	**40.6%**
of which Total Non-performing	***8,531***	***4,132***	***441***	***3,261***	***2,947***	***2,877***	***23.2%***	***3.9%***	***6.1%***	***7.3%***	***17.0%***	***42.4%***

1 'Others' comprises industries with outstandings lower than EUR 10 billion.

Cover values including guarantees received - Business lending portfolio – 2017

Region		Outstandings	Cover type: Mortgages	Eligible Financial Collateral	Other CRR/CRD IV eligible	Guarantees	Non CRR/CRD IV eligible	Value to Loan: No Cover	>0% - 25%	>25%-50%	>50% - 75%	>75% - <100%	≥ 100%
Africa		2,713	10	60	238	2,007	608	26.0%	3.7%	3.2%	9.0%	19.8%	38.2%
America		40,603	4,819	4,504	29,677	6,712	18,799	35.0%	3.5%	5.0%	7.4%	8.4%	40.7%
Asia		41,100	670	1,343	12,319	15,126	9,061	45.8%	10.2%	6.1%	6.4%	4.7%	26.9%
Australia		5,578	4,266	49	1,018	685	857	34.8%	1.3%	3.4%	4.6%	7.3%	48.6%
Europe	Belgium	46,993	32,474	1,280	6,483	18,514	27,670	27.5%	1.9%	2.7%	4.7%	6.4%	56.8%
	Germany	11,952	2,067	41	575	1,485	3,400	56.3%	4.6%	4.3%	4.3%	3.6%	26.8%
	Netherlands	62,391	51,973	2,406	24,229	8,233	13,005	26.5%	2.8%	3.5%	7.7%	15.1%	44.3%
	Rest of Europe	108,822	38,389	5,502	25,029	38,014	55,585	37.8%	6.9%	4.7%	5.3%	7.6%	37.7%
Total Business Lending		**320,153**	**134,667**	**15,185**	**99,569**	**90,777**	**128,985**	**35.3%**	**5.2%**	**4.3%**	**6.1%**	**8.6%**	**40.6%**
of which Non-performing		***8,531***	***4,132***	***441***	***3,261***	***2,947***	***2,877***	***23.2%***	***3.9%***	***6.1%***	***7.3%***	***17.0%***	***42.4%***

The tables above provide the collateralisation of ING Bank's business lending portfolio. Breakdowns are provided per industry as well as by geographical region or market, which are defined based on the residence of the borrowers. The risk profile of the business lending portfolio increased in 2018 as collateralisation coverage fell by 4.7%. Business lending growth exceeded the increase in total cover value in 2018, with business lending outstandings rising by EUR 45.3 billion while covers increased by EUR 41.2 billion.

Broken down by industry, the largest increase in outstandings is attributable to Central Banks (234.6%), mainly driven by a growth in Regulatory Reserve Deposits at the Dutch Central Bank. The largest decrease in outstandings was observed in Commercial Banks (-8.8%), due primarily to a fall in Nostro balances.

The value to loan for no covers in the Netherlands increased substantially year over year from 26.5% to 43.5% in 2018. This coincided with an increase in fully covered outstandings in the Netherlands. Utilities were the only industry to experience a decrease in total covers (EUR 3,7billion), but while other industries' cover levels grew, outstandings grew faster. Eligible financial collateral for Non-Bank financial institutions increased substantially (9.6%), and outstandings grew at 19.6%.

The largest increases in outstandings were seen in the Netherlands (35.7%) and in the region America (17.3%). The increase in the Netherlands was primarily due to a large increase in revolving loans in the form of regulatory reserve deposits. As these deposits are not collateralised, this increase had no effect in total cover amounts.

Pre-settlement portfolio

ING uses various market pricing and measurement techniques to determine the amount of credit risk on pre-settlement activities. These techniques estimate ING's potential future exposure on individual and portfolios of trades. Master agreements and collateral agreements are frequently entered into to reduce these credit risks.

ING matches trades with similar characteristics to determine their eligibility for offsetting. This offsetting effect is called 'compensation'. Therefore, ING reduces the amount by any legal netting that may be permitted under various types of Master Agreements, such as ISDA Master Agreements, Global Master Repurchase Agreements (GMRA), Global Master Securities Lending Agreements (GMSLA), etc. Lastly, the amount is further reduced by any collateral that is held by ING under Credit Support Annexes (CSAs) or other similar agreements.

The use of Central Clearing Parties (CCPs) for the settlement of derivative transactions continues to grow and consequently the credit risk shifts more and more from the trading Counterparties to the CCPs. In 2018, the notional Pre-Settlement exposure that was cleared via CCPs formed 58.3% of the total notional (56.8% in 2017).

As part of its securities financing business, ING entities actively enter into agreements to sell and buy back marketable securities. These transactions can take many legal forms. Repurchase and reverse repurchase agreements, buy/sell-back and sell/buyback agreements, and securities borrowing and lending agreements are the most common. As a general rule, the marketable securities that have been received under these transactions are eligible to be resold or re-pledged in other (similar) transactions. ING is obliged to return equivalent securities in such cases.

- The 'Gross MtM before netting and collateral' is the exposure calculated in accordance with the Current Exposure Method (CEM, which in the EU regulation is referred to as the Mark-to-Market method) without accounting for any netting or collateral benefit;
- The 'MtM after netting' is the exposure, according to the CEM, taking into account the benefit of legally enforceable netting agreements (e.g. ISDAs), but without considering the benefit of margin collateral (e.g. CSAs);
- The 'MtM after netting and collateral' is the exposure according to the CEM, taking into account both the benefit of netting and marginal collateral. In other words, the gap between the 'MtM after netting' and 'MtM after netting and collateral' is the liquid collateral (cash and securities); and
- The outstandings column represents CEM exposure (MtM after netting plus the Potential Future Exposure - PFE) at a 97.5% confidence level for derivatives and securities.

During 2018 the pre-settlement portfolio increased when expressed in terms of outstandings. The pre-settlement portfolio was mainly concentrated in rest of Europe to a central counterparty clearinghouse and commercial banks in the UK, mostly consisting of Interest Rate Derivatives, FX Derivatives, Securities Financing and Credit Derivatives. The outstandings increase was due to security financing to Belgian National Bank.

Pre-settlement portfolio

Region		2018 Gross MtM before netting and collateral	2018 MtM after netting	2018 MtM after netting and collateral	2018 Out-standings	2017 Gross MtM before netting and collateral	2017 MtM after netting	2017 MtM after netting and collateral	2017 Out-standings
Africa		49	38	38	50	107	96	85	119
America		20,671	11,110	7,239	8,276	21,296	10,864	6,846	7,690
Asia		6,723	3,565	3,312	3,617	7,150	3,663	3,020	3,542
Australia		403	288	288	328	483	264	241	532
Europe	Belgium	13,623	2,600	2,561	12,097	5,165	3,761	2,880	2,215
	Germany	3,713	1,429	1,256	2,018	4,481	2,091	1,397	2,264
	Netherlands	6,114	3,192	2,407	4,243	6,701	4,174	2,771	4,062
	Rest of Europe	95,887	19,788	17,341	20,991	104,788	22,404	17,637	24,260
Total Pre-settlement		**147,183**	**42,009**	**34,442**	**51,620**	**150,171**	**47,316**	**34,877**	**44,685**
of which Non-performing		**19**	**19**	**19**	**25**	***23***	***25***	***25***	***29***

Credit quality

Following the higher credit risk levels seen as a result of the financial crisis and economic downturn, credit quality has been improving since 2014 and also continued the improving trend in 2018.

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.

The credit quality of the ING portfolio improved with non-performing outstandings which continued to decrease. The reduction in the non-performing portfolio was due to repayments combined with positive rating migration to the performing portfolio. The decrease was mainly observed in Retail Netherlands and Netherlands WB portfolio. The increase in the past due but performing portfolio mainly observed in Belgium & Luxembourg Retail portfolio.

Credit quality: ING Bank portfolio, outstandings

	2018	2017
Neither past due nor non-performing	816,063	756,803
Consumer lending past due but performing (1–90 days)	4,440	4,352
Non-performing [1]	11,102	12,481
Total	**831,605**	**773,636**

1 Based on lending and investment activities

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 (e-mail, SMS, letter or outbound call) 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 (no more cure) when the contract is terminated. The table below captures all past due exposures starting from day 1.

Aging analysis (past due but performing): ING Bank consumer lending portfolio, outstandings[1]

	2018	2017
Past due for 1–30 days	3,283	3,464
Past due for 31–60 days	892	724
Past due for 61–90 days	265	163
Total	**4,440**	**4,352**

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 increased by EUR 0.1 billion. The improvement mostly in the 1-30 bucket has been driven by the Netherlands residential mortgages due to macro-economic factors (low unemployment, low inflation and increasing house prices), while in the 31-60 and 61-90 days past due buckets an increase has been witnessed in the Belgium residential mortgages portfolio, largely related to an operational impact of the merger with Record Bank (a difference in the repayments process). The increase has been partly offset by a decrease in Australia and the rest of Europe.

Aging analysis (past due but performing): ING Bank consumer lending portfolio by geographic area, outstandings[1]

Region		Residential Mortgages	Other retail	Total	Total
Africa				1	1
America		3		3	3
Asia		2		2	1
Australia		178	1	178	251
Europe	Belgium	1,483	387	1,870	1,671
	Germany	502	104	606	497
	Netherlands	924	11	934	1,062
	Rest of Europe	383	463	847	866
Total		**3,474**	**966**	**4,440**	**4,352**

1 Based on consumer lending. The amount of past due but performing financial assets in respect of non-lending activities was not significant.

Wholesale Banking: for business loans (governments, institutions, and corporates), ING classifies the relevant obligors 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 period:
  - Corporates: more than 90 days; and
  - Financial Institutions and Governments: from day 1, however, a research 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 examples of financial difficulty indicators:
  (1) The borrower (or third party) has started insolvency proceedings.
  (2) NPL status of a group company/co-borrower.
  (3) Significant fraud (affecting the company's ability to service its debt)
  (4) There is doubt as to the borrower's ability to generate stable and sufficient cash flows to service its debt.
  (5) 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.

Wholesale Banking has an individual name approach, using Early Warnings indicators to signal possible future issues in debt service.

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 in categorizing 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 the 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 as 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 nor the liquidation the 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 are discussed at least on a quarterly basis between the Front Office, GCR, and the respective Credit Risk Management executives, at which time it may be decided to change the status of an account from Watch List to Restructuring or Recovery or vice versa.

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: ING Bank portfolio portfolio, outstandings by economic sector and business lines

	Wholesale Banking		Retail Benelux		Retail Challengers & Growth Markets		Corporate Line		Total	
Industry	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Private Individuals	1	1	2,163	2,567	1,535	1,526			3,698	4,094
Natural Resources	925	1,673	43	21	54	48			1,022	1,742
Real Estate	823	1,149	333	367	3	7			1,159	1,523
Transportation & Logistics	599	749	177	219	28	16			804	983
Builders & Contractors	405	390	332	344	152	130			889	863
General Industries	373	340	186	152	135	120			693	612
Services	260	282	265	255	38	41			563	578
Food, Beverages & Personal Care	372	164	294	304	109	102			775	570
Other [1]	612	639	436	450	135	119	314	308	1,497	1,516
Total	**4,370**	**5,385**	**4,229**	**4,679**	**2,188**	**2,109**	**313**	**308**	**11,102**	**12,481**

1 Economic sectors not specified in above overview are grouped in Other.

Non-performing Loans: ING Bank portfolio, outstandings by economic sectors and geographical area

	Region								Total	Total
Industry	Netherl-ands	Belg-ium	Germ-any	Rest of Europe	Austr-alia	Asia	Ame-rica	Africa	2018	2017
Private Individuals	973	1,137	671	679	230	2	4	1	3,698	4,094
Natural Resources	105	27		169	116	192	322	91	1,022	1,742
Real Estate	369	213	33	542			1		1,159	1,523
Transportation & Logistics	348	50	1	299	42	10	55		804	983
Builders & Contractors	146	275	1	381			87		889	863
General Industries	153	114	12	374			41		693	612
Services	148	256		115		7	36		563	578
Food, Beverages & Personal Care	210	125	27	212		26	176		775	570
Other [1]	670	238	3	477			55	55	1,497	1,516
Total	**3,122**	**2,435**	**748**	**3,248**	**387**	**237**	**777**	**148**	**11,102**	**12,481**

1 Economic sectors not specified in above overview are grouped in Other.

Non-Performing portfolio decreased within ING Bank over 2018. The overall outstandings decrease in non-performing loans were due to positive risk migration and repayments. The biggest decrease was witnessed in Netherlands Retail and Netherlands WB portfolio. In Netherlands Retail, the biggest decrease was observed in residential mortgages portfolio.

In Netherlands, EUR 973 million of the non-performing loan portfolio consisted of loans to private individuals, of which EUR 834 million were residential mortgages. In Belgium, almost half of the non-performing portfolio consisted of loans to private individuals of which EUR 883 million was residential mortgages. Similarly, in Germany, more than half of the non-performing portfolio consisted of residential mortgages.

Loan Loss Provisioning

As of 1 January 2018, the IFRS 9 accounting rules on loan loss provisioning have been implemented. These accounting rules do not change the actual credit losses, but have an impact on the timing of when these losses are reflected in the P&L. Under IFRS 9 loan loss provisions are booked given expected losses, whereas under the IAS 39 accounting practice loan loss provisions were booked from the moment losses were incurred. More specifically, loan loss provisioning becomes more forward-looking under IFRS 9 partly due to the fact that provisions will be based on the macroeconomic outlook, amongst other factors. Furthermore, loan loss provisioning will be calculated on the lifetime expected losses for assets that have experienced a significant deterioration in credit quality. As a result of these elements, loan loss provisioning in the P&L could become more volatile. More information on the impairment methodology for financial assets under IFRS 9 can be found in 'Note 1 Accounting policies' under part b) IFRS 9 'Financial instruments' - Accounting policies applied from 1 January 2018 sub-section iv) Impairment of financial assets.

ING Bank portfolio per IFRS 9 stage and rating class[1,2,3]

2018		Stage 1		Stage 2		Stage 3		Total	
Rating class		Outstandings	Allowance	Outstandings	Allowance	Outstandings	Allowance	Outstandings	Allowance
Investment grade	1 (AAA)	67,543	1					67,543	1
	2-4 (AA)	63,357	3	21				63,378	3
	5-7 (A)	95,514	11	1,694				97,208	11
	8-10 (BBB)	247,452	54	3,968	5			251,420	59
Non-Investment grade	11-13 (BB)	178,318	227	9,052	72			187,370	299
	14-16 (B)	25,241	197	18,723	388			43,964	585
	17 (CCC)	294	8	3,987	157			4,281	165
Substandard grade	18 (CC)			3,399	147			3,399	147
	19 (C)			1,979	156			1,979	156
NPL grade	20-22 (D)					10,575	3,139	10,575	3,139
Total		**677,719**	**501**	**42,823**	**925**	**10,575**	**3,139**	**731,117**	**4,565**

1 Total outstanding excludes non-IFRS 9 eligible assets (for such exposures no IFRS stage is available: mainly guarantees, letters of credit and pre-settlement exposures).
2 Total provisions exclude EUR 2 million Purchased Credit Impaired.
3 For a reference to the Notes in the Annual Report we refer to the table 'Reconciliation between credit risk categories and financial position'

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Of the total ING Bank portfolio, 81.5% of total outstandings is classified as stage 1, while stage 2 and 3 make up 5.1% and 1.3% of total outstandings, respectively. The remaining 12.1% of the outstandings is not measured in accordance to IFRS 9 impairments (mainly guarantees, letters of credit and pre-settlement exposures).

Investment grade outstandings is 84.8% stage 1 and 1.0% stage 2. Non-Investment grade is 79.6% % stage 1 and 12.4% stage 2. Substandard grade is 96.8% stage 2, while 94.2% of NPL grade outstandings is classified as stage 3 (the rest of the NPL outstandings is not eligible for IFRS 9).

Sensitivity analysis of key sources of estimation uncertainty

The introduction 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, the Group use 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 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 likely to wane. For the Eurozone, as output gaps close and monetary policy begins to normalize, growth is expected to decline. For the US, the near-term outlook is still positive, but over the forecast period we expect growth to fall below the recent trend as the impact of tax cuts and of higher interest rates begin to take effect. 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 synchronized 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.

- **Probability weights applied to each of the three scenarios**

The alternative scenarios are 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.

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 being defined. The upside scenario is represented by the 10th percentile of the distribution. The distribution of the scenarios for economic growth, taking into account the applicable percentile of the distribution, is resulting in the upside scenario to be weighted at 20%, the downside scenario to be weighted at 20% and consequently, the base case scenario to be weighted at 60%.

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 for 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. This is supported by statistical analysis. These forward-looking macroeconomics (amongst others) are used in the calculation of the Group's un-weighted ECLs, which are applied the probability-weightings as disclosed, to arrive at the reportable ECL for collectively-assessed assets. Whilst 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.

ING Bank: Sensitivity analysis[1,2,3]

		2019	2020	2021	Un-weighted ECL (Eur mln)	Probability-weighing	Reportable ECL (Eur mln)[4]
Netherlands							
Upside scenario	Real GDP	3.0	3.9	3.2	438	20%	
	Unemployment	2.8	2.4	2.2			
	HPI	15.3	11.7	3.0			
Baseline Scenario	Real GDP	2.2	1.7	1.6	493	60%	507
	Unemployment	3.7	3.9	4.1			
	HPI	4.4	3.2	2.9			
Downside scenario	Real GDP	0.0	-0.5	0.5	615	20%	
	Unemployment	5.0	6.3	7.0			
	HPI	-6.5	-6.7	2.8			
Germany							
Upside scenario	Real GDP	3.2	3.6	1.9	480	20%	
	Unemployment	2.4	1.7	1.5			
	HPI	6.7	5.9	5.9			
Baseline Scenario	Real GDP	1.7	1.6	1.3	528	60%	535
	Unemployment	3.2	3.2	3.3			
	HPI	3.2	2.4	2.4			
Downside scenario	Real GDP	-0.6	-0.9	0.6	613	20%	
	Unemployment	4.3	4.8	5.3			
	HPI	-0.4	-1.3	-1.5			
Belgium							
Upside scenario	Real GDP	2.7	3.0	2.3	351	20%	
	Unemployment	5.8	5.6	5.5			
	HPI	5.0	4.2	4.3			
Baseline Scenario	Real GDP	1.5	1.6	1.6	381	60%	390
	Unemployment	6.3	6.2	6.2			
	HPI	3.4	3.4	3.4			
Downside scenario	Real GDP	-0.1	0.2	1.2	455	20%	
	Unemployment	7.8	8.6	8.5			
	HPI	1.5	2.6	2.4			
United States							
Upside scenario	Real GDP	3.5	4.1	3.7	58	20%	
	Unemployment	2.5	1.7	1.5			
	HPI	6.8	8.9	8.2			
Baseline Scenario	Real GDP	2.7	1.8	1.8	103	60%	119
	Unemployment	3.6	3.8	3.9			
	HPI	4.3	3.4	2.9			
Downside scenario	Real GDP	0.2	-0.5	0.2	228	20%	
	Unemployment	5.1	6.6	7.2			
	HPI	1.8	-2.3	-3.3			

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 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 PD being assessed against a set of PD threshold bandings, which determines the appropriate staging and ECL. The Group reports total ECL collective-assessment of 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 assets were above the threshold, and apportioned a lifetime ECL. This gave rise to a hypothetical collective-assessment ECLs of EUR 888 million and EUR 3,333 million respectively.

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 1.3.1.2 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.

Forbearance

Forbearance occurs when a client is considered to be unable to meet their financial commitments under their contract due to financial difficulties and ING decides to grant concessions towards the client. Forborne exposures are exposures in respect of which forbearance measures have been granted. Forbearance measures can be either modifications to existing contractual terms and conditions or total or partial refinancing. Within ING, forbearance is based on the EBA Standards.

To identify forbearance, ING assesses clients with Early Warning Signals, Watch List, Restructuring, Default or Recovery status. ING reviews the performance of forborne exposures at least quarterly, either on a case-by-case (business) or on a portfolio (retail) basis.

For corporate customers, ING applies forbearance measures to support clients with fundamentally sound business models that are experiencing temporary difficulties with the aim to maximise the client's repayment ability.

For ING retail units, clear criteria have been established to determine whether a client is eligible for forbearance – generally as part of an automated process. Specific approval mandates are in place to approve the measures, as well as procedures to manage, monitor and report the forbearance activities.

Exposures with forbearance measures can be either performing (Risk Ratings 1-19) or non-performing (Risk Ratings 20-22). ING uses specific criteria to move forborne exposures from non-performing to performing and 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.

ING Bank: Summary Forborne portfolio[1]

	2018				2017			
Business Line	Outstandings	Of which: Performing	Of which: Non-Performing	% of total portfolio	Outstandings	Of which: Performing	Of which: Non-Performing	% of total portfolio
Wholesale Banking	5,130	3,100	2,029	1.8%	6,162	2,776	3,386	2.1%
Retail Banking	5,010	2,858	2,152	1.2%	5,657	3,074	2,583	1.3%
Total	**10,140**	**5,959**	**4,181**	**1.4%**	**11,819**	**5,849**	**5,969**	**1.6%**

1 Undrawn commitments are excluded.

ING Bank: Summary Forborne portfolio by forbearance type

	2018				2017			
Forbearance type	Outstandings	Of which: Performing	Of which: Non-Performing	% of total portfolio	Outstandings	Of which: Performing	Of which: Non-Performing	% of total portfolio
Loan modification	8,456	4,837	3,620	1.1%	9,752	4,562	5,190	1.2%
Refinancing	1,684	1,122	561	0.2%	2,066	1,287	779	0.2%
Total	**10,140**	**5,959**	**4,181**	**1.4%**	**11,819**	**5,849**	**5,969**	**1.6%**

1 Undrawn commitments are excluded.

ING implemented its forbearance policy in 2014. In 2016 based on a detailed re-assessment of the relevant standards set by EBA and subsequent regulatory guidance, ING tightened the definitions under its forbearance policy. As a result of these revisions in definition and scope, performing forborne exposures recognized by ING increased significantly in 2016 as measures taken in previous periods were then recognized as forbearance. Examples of measures taken were commercially justifiable measures, modifications of covenants as well as waivers of covenant breaches.

As per December 2018 ING's total forborne portfolio decreased by EUR 1.7 billion (14%) to EUR 10.1 billion, mainly driven by Wholesale Banking (EUR -1.0 billion). The scope of forbearance has been narrowed down in accordance with the policy *"Managing Special Assets: Watch List Restructuring and Recovery"*, and as from 2Q18 financial guarantees and letters of credit are excluded, reducing total forborne portfolio by EUR 249 million.

Wholesale Banking

As per December 2018, Wholesale Banking forborne portfolio amounted to EUR 5.1 billion, which represented 1.8% of the total Wholesale Banking portfolio.

Wholesale Banking: Forborne portfolio by geographical area[1]

		2018			2017		
Region		Outstandings	Of which: Performing	Of which: Non-Performing	Outstandings	Of which: Performing	Of which: Non-Performing
Europe	Netherlands	1,148	687	461	1,593	816	777
	Belgium	131	102	29	223	105	118
	Germany	127	94	33	45	23	22
	Rest of Europe	1,896	1,081	815	2,456	867	1,589
Africa		148	55	93	156	84	72
America		1,173	695	478	1,212	584	628
Asia		378	300	78	428	291	137
Australia		128	86	42	49	7	42
Total		**5,130**	**3,100**	**2,029**	**6,162**	**2,776**	**3,386**

1 Undrawn commitments are excluded.

Wholesale Banking: Forborne assets by economic sector[1]

Industry	2018 Outstandings	2018 Of which: Performing	2018 Of which: Non-Performing	2017 Outstandings	2017 Of which: Performing	2017 Of which: Non-Performing
Natural Resources	1,474	943	532	1,995	743	1,251
Real Estate	999	601	398	1,467	824	643
Transportation & Logistics	868	445	423	988	398	590
General Industries	405	193	212	329	140	189
Food, Beverages & Personal Care	244	161	83	199	139	60
Chemicals, Health & Pharmaceuticals	189	171	19	56	52	4
Utilities	181	30	152	177	9	168
Builders & Contractors	146	37	109	435	174	261
Services	138	85	53	289	137	151
Automotive	134	131	3	5	3	3
Retail	118	84	34	82	56	26
Telecom	89	88	1	39	14	25
Other	144	132	12	101	86	15
Total	**5,130**	**3,100**	**2,029**	**6,162**	**2,776**	**3,386**

1 Undrawn commitments are excluded.

The main concentration of forborne portfolio in a single country was in the Netherlands with 22% (2017: 26%) of the total Wholesale Banking forborne portfolio, and 23% (2017: 23%) of the total non-performing forborne portfolio.
Wholesale Banking forborne portfolio decreased by EUR 1.0 billion compared to 2017, of which the non-performing forborne portfolio decreased by EUR 1.4 billion which was partially offset by the increase in the performing forborne portfolio by EUR 0.3 billion.

Wholesale Banking forborne portfolio were mainly concentrated in Natural Resources, Real Estate and Transportation & Logistics. Together they accounted for 65% (2017: 72%) of the total Wholesale Banking forborne portfolio and 67% (2017: 73%) of the total Wholesale Banking non-performing forborne portfolio. Decreases in forborne portfolio were mainly visible in the industries Natural Resources (EUR 0.5 billion), Real Estate (EUR 0.5 billion) and Builders & Contractors (EUR 0.3 billion).

Retail Banking

As per end of December 2018, Retail Banking forborne portfolio amounted to a total of EUR 5.0 billion, which represented 1.2% of the total Retail Banking portfolio.

Retail Banking: Forborne assets by geographical area[1]

Region		2018 Outstandings	2018 Of which: Performing	2018 Of which: Non-Performing	2017 Outstandings	2017 Of which: Performing	2017 Of which: Non-Performing
Europe	Netherlands	2,461	1,514	946	3,036	1,727	1,309
	Belgium	1,046	383	663	1,096	399	697
	Germany	462	337	126	541	432	109
	Rest of Europe	656	397	259	639	342	297
Africa					1		1
America		1		1	1		1
Asia		3	2	1	2	2	
Australia		381	225	156	342	172	170
Total		**5,010**	**2,858**	**2,152**	**5,657**	**3,074**	**2,583**

1 Undrawn commitments are excluded.

The main concentration of forborne portfolio in a single country was in the Netherlands with 49% (2017: 54%) of the total Retail Banking forborne portfolio and 44% (2017: 51%) of the non-performing forborne portfolio. Retail banking forborne portfolio decreased by EUR 0.6 billion compared to 2017, of which EUR 0.4 billion driven by the consumer portfolio.

Securitisations

ING primarily plays three roles in its exposure to securitisations programs which are:

ING as Investor

ING's goal is to maintain a portfolio of high quality liquid assets that meet the regulatory requirements of CRR/CRD IV and the Delegated Act of October 2014 regarding liquidity. ING invests in high quality Asset Backed Securities (ABS) keeping close track of the securitisation investment positions via monthly monitoring reports and weekly update calls. Additionally, ING may invest in securitisation positions in order to facilitate client business from its Disintermediation & Asset Securitisation unit.

ING as Originator

ING occasionally originates its own securitisation transactions for economic and regulatory capital purposes, as well as liquidity and funding purposes. Securitisations originated by a company may only be considered for balance sheet derecognition when the requirements for significant credit risk transfer have been fulfilled. ING has executed a very limited number of external transactions as originator.

ING as Sponsor

In the normal course of business, ING structures financing transactions for its clients by assisting them in obtaining sources of liquidity by selling the client's receivables or other financial assets to a special purpose vehicle (SPV). Senior positions in these transactions are often 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 facilitates these transactions by providing structuring, accounting, funding and operations services. ING also provides support facilities (liquidity facilities) backing the transactions funded by the conduit. Mont Blanc Capital Corp. is fully consolidated into the ING annual accounts.

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. See the Risk Governance paragraph under the General risk Management section for details of the "three line of defence" governance model. The goal of risk identification is to detect potential new risks and any changes in known risks;
- 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 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 risk relevant at the respective levels.

Several committees govern the communication between the parties involved in market risk management. Market Risk Model Committee (MRMC) is the highest dedicated authority within ING for the approval of all trading and banking risk models, methodologies and parameters related to market risk. Trading Pricing Model Committee (TPMC) approves pricing models for trading and banking books. The Global Credit Trading Policy committee (GCTP) is the highest dedicated authority with representatives from Financial Risk, CRO Challengers & Growth Markets and CRO Wholesale Banking for the approval of policies, models, methodologies and parameters related to credit risk and trading risk, and for the consideration of risk appetite and risk governance. Systematic risk reporting takes place by the Financial Risk and FI-FM Risk departments 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.

This market risk paragraph elaborates on the various elements of the risk management framework for:

- Market risk economic capital for the trading and banking books;
- Market risks in the banking books; and
- Market risks in the trading books.

Economic capital for market risk

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 99.95% confidence interval 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 interval, 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 interval and holding period. In determining this scaling factor, several other factors are also taken into account like the occurrence of large market movements (events) and management interventions.

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 and volatility 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.

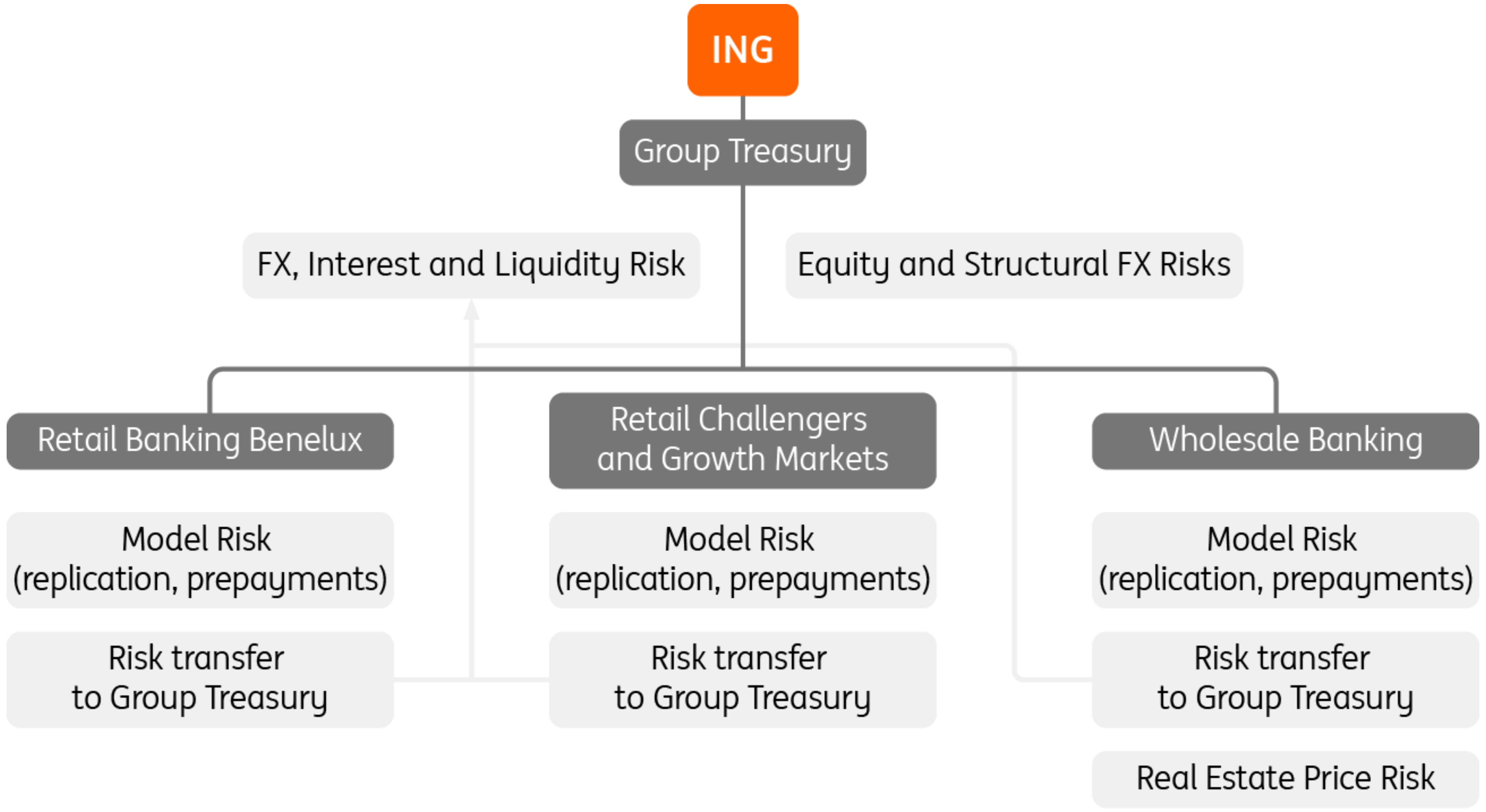
While aggregating the different economic capital market risk figures for the different portfolios, diversification benefits (based on stressed correlations) are taken into account as it is not expected that all extreme market movements will appear at the same moment.

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:



The merge of Bank Treasury and Capital Management into Group Treasury was completed by the end of June 2018.

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 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 typically back tested at least semi-annually 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.

Developments relating to IRRBB

During 2018 ING implemented the following refinements to the risk measurement for Interest Rate Risk in the Banking Book:

- 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;
- Implementation of scenarios for the interest rate sub-risk types tenor basis risk, vega optionality risk and currency diversion risk;
- With respect to the capital investments, the internal view on capital replication is reflected in the NPV-at-Risk limit for the capital book as of July 2018; 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 scenario and upward shock scenarios 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

	2018		2017	
	Ramped, unfloored		Ramped, unfloored	
	parallel ▼	parallel ▲	parallel ▼	parallel ▲
By business				
Wholesale Banking	–204	239	–185	201
Retail Banking Benelux	–49	22	17	–48
Retail Challengers & Growth Markets	165	–186	101	–133
Corporate Line Banking	–30	30	–24	13
Total	**–119**	**106**	**–91**	**33**

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

	2018		2017	
	Ramped, unfloored		Ramped, unfloored	
	parallel ▼	parallel ▲	parallel ▼	parallel ▲
By currency				
Euro	–81	60	–83	9
US Dollar	20	–20	10	–20
Other	–57	65	–19	44
Total	**–119**	**106**	**–91**	**33**

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

	2018		2017	
	unfloored		unfloored	
	parallel ▼	parallel ▲	parallel ▼	parallel ▲
By business				
Wholesale Banking	–55	134	309	–184
Retail Banking Benelux	–1,344	–269	–492	–468
Retail Challengers & Growth Markets	–521	–54	–368	–17
Corporate Line Banking	–38	35	1,476	–1,404
Total	**–1,958**	**–153**	**926**	**–2,073**

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 NPV-at-Risk for the Corporate Line decreased in 2018, driven by the own funds long-term investments. The internal view on capital replication of the own funds long-term investments is reflected in the NPV-at-Risk figures as of July 2018. The remaining NPV-at-Risk of EUR -38 million includes the mismatch position from the target investment profile. Further, 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.

Basis Point Value (BPV)

BPV measures the impact of a one basis point increase in interest rates on value. To a large extent the BPV and NPV-at-Risk reflect the same risk - the difference being that BPV does not reflect convexity risk, given the small shift in interest rates.

BPV banking books per currency

in EUR thousands	2018	2017
By currency		
Euro	–12,116	–18,446
US Dollar	–1,165	–1,417
Other	483	1,583
Total	**–12,797**	**–18,280**

Year-on-year variance analysis

The overall BPV reduced by EUR 5.5 million to EUR -12.8 million in 2018.

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 1%, the drop in the CET1 ratio would be 0.23%.

Net banking currency exposures banking books

	Foreign Investments		Hedges		Net exposures	
	2018	2017	2018	2017	2018	2017
US Dollar	**5,794**	2,487	**–1**	4	**5,793**	2,491
Pound Sterling	**614**	667			**614**	667
Polish Zloty	**2,563**	2,398	**–526**	–618	**2,036**	1,780
Australian Dollar	**3,569**	3,769	**–2,398**	–2,792	**1,171**	977
Turkish Lira	**1,219**	1,828			**1,219**	1,828
Chinese Yuan	**2,208**	2,762			**2,208**	2,762
Indian Rupee	**917**	937			**917**	937
Russian Rouble	**460**	549	**–101**	–154	**359**	395
Other currency	**4,462**	3,993	**–2,057**	–2,016	**2,405**	1,978
Total	**21,806**	19,390	**–5,084**	–5,576	**16,722**	13,815

The regular USD funding to ING Capital LLC was replaced by evergreen funding (a loan without a contractual maturity) which is classified as a Net Investment in Foreign Operation. This brings the FX position closer to the position needed for ratio hedging.

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 1,203 million (2017: EUR 1,088 million) and equity securities held at fair value through other comprehensive income (FVOCI) of EUR 3,228 million (2017: held in the Available-for-sale (AFS) portfolio, under IAS 39 for EUR 3,983 million). The value of equity securities held at FVOCI is directly linked to equity security prices with increases/decreases being recognised 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 2,474 million per year end 2017 to EUR 1,914 million per year end 2018. In 2018 the securities at FVOCI decreased by EUR 560 million and is the result of the combined impact of IFRS 9 (EUR 42 million), and the decrease in the value of primarily Bank of Beijing and Kotak Mahindra Bank.

Revaluation reserve equity securities at fair value through other comprehensive income[1]

	2018	2017
Gross unrealised gains	n/a	2,478
Gross unrealised losses	n/a	–4
Positive re-measurement	1,923	n/a
Negative re-measurement	–8	n/a
Total	**1,914**	**2,474**

1 The 2017 figures are presented as Available-for-sale under IAS 39. With the introduction of IFRS 9 these have been classified as fair value through other comprehensive income.

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.

Risk profile

ING has two different main categories of Real Estate exposure on its banking books: first, its own buildings which ING occupies, and second, development assets, which mostly consist of former Real Estate Development and Real Estate Investment Management activities. The total Real Estate exposure amounts to EUR 0.9 billion (excluding property from foreclosures and third party interest). ING has EUR 0.1 billion recognised at fair value through profit and loss and EUR 0.8 billion is recognised at cost or revalued through equity (with impairments going through profit and loss). A split on the Real Estate exposure per continent and sector based on the risk management view is shown below.

Real Estate market risk exposure in banking books (by geographic area and sector type)

Continent	2018	2017	Sector	2018	2017
Europe	824	827	Residential	64	72
Americas	27	25	Office	791	785
Australia	-	–	Retail	2	8
Asia	-	–	Industrial	16	12
Other	61	82	Other	40	57
Total	913	934	**Total**	913	934

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 serve to benefit from short-term price movements. In 2018, 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, the reporting and monitoring of risk exposures against approved trading limits, and the validation of pricing models. 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.

Basel Committee/CRD IV

ING follows the regulatory framework set out in the Capital Requirements Regulation (CRR/CRD IV) for its regulatory capital calculations. ING is closely monitoring the progress on CRR II/CRD V regulation. The CRR II will include among others the European regulations conform the Fundamental Review of the Trading Book (FRTB) standards by BCBS. In January 2019, the BCBS released the final FRTB standards. The requirements and timelines of FRTB capital will be specified in CRR III regulations, FRTB capital requirements are expected to have a significant impact on the Pillar I calculations.

Value at Risk

FI-FM Risk uses the historical simulation VaR methodology as its primary risk measure. The VaR 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, VaR 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, only for a limited number of linear trading positions and a limited number of 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 VaR with a 1-day horizon for internal risk measurement, management control, and backtesting, and VaR with a 10-day horizon for determining regulatory capital. To compute VaR with a 10-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

VaR has some limitations, such as the following: VaR uses historical data to forecast future price behaviour. 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 99% confidence level means that VaR 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 VaR model in use. Although VaR 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 1-day VaR. In addition to using actual results for backtesting, ING also uses hypothetical results, which excludes the effect of intraday trading, fees, and commissions. When the actual or hypothetical loss exceeds the VaR, an 'outlier' occurs. Based on ING's one-sided confidence level of 99%, an outlier is expected once in every 100 business days. In 2018 there was one occurrence where actual and hypothetical daily trading loss exceeded the daily consolidated VaR of ING. The loss was driven by Foreign Exchange and Equity positions. ING reports the backtesting results on a quarterly basis to the ECB.

Stressed VaR

The SVaR is intended to replicate a VaR 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 VaR with a 10-day horizon. The historical data period used currently includes the height of the credit crisis around the fall of Lehman Brothers, and 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 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. Non-securitised 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. 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. In addition to the bank-wide stress test framework as described in the stress testing section, FI-FM Risk performs separate stressed scenario tests under the Event Risk framework to monitor market risks under extreme market conditions. Since VaR in general does not produce an estimate of the potential losses that can occur as a result of extreme market movements, ING uses structured stressed scenario tests to calculate Event Risk for monitoring the market risk under these extreme conditions. 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 the ING trading activity is generated on a weekly basis. Like VaR, 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 stress test, additional scenario assumptions could 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.

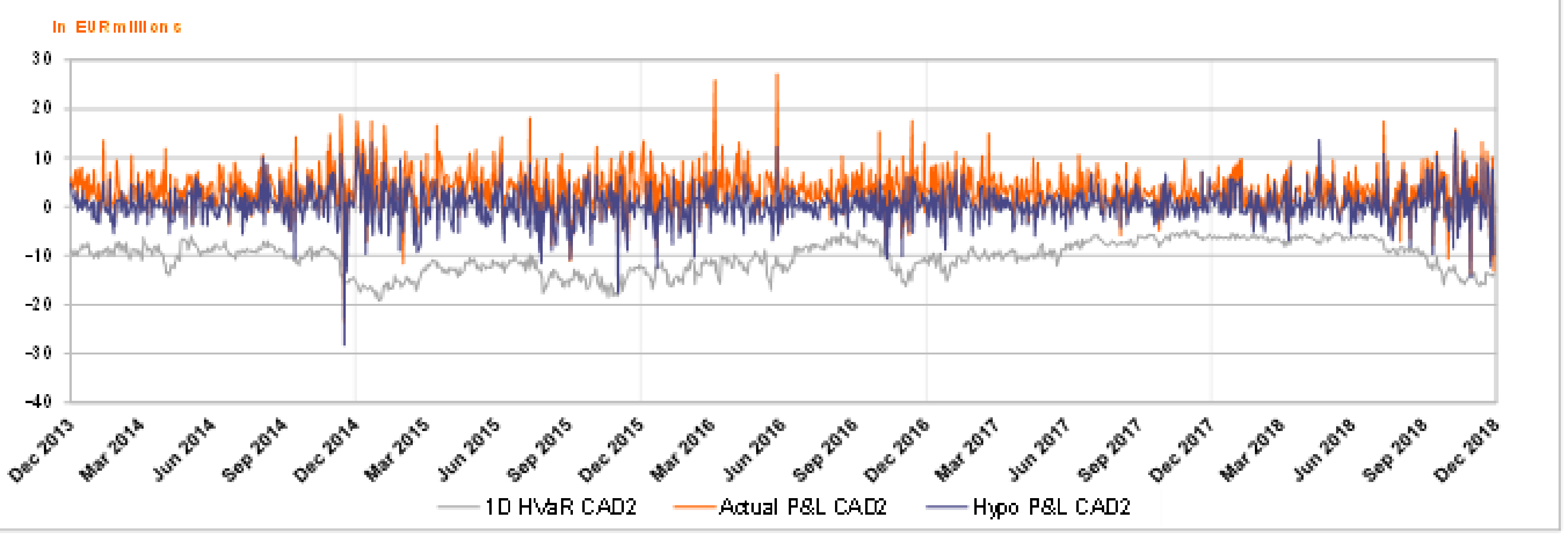
Other trading controls

VaR 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 VaR under a 99% confidence interval and a 1-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 VaR is presented for the ING trading portfolio from 2013 to 2018.

EU MR4. Consolidated trading VaR ING Bank



1 CVA risk is not included in VaR. Reserves are not included in the P&L figures.

The risk figures in the table below only relate to the trading books for which the internal model approach is applied.

1d VaR for Internal Model Approach trading portfolios

	Minimum		Maximum		Average		Year end	
amounts in millions of euros	2018	2017	2018	2017	2018	2017	2018	2017
Interest rate	3	4	7	15	5	7	4	4
Equity and commodity	1	1	10	4	3	3	7	2
Foreign exchange	1	1	10	4	4	2	9	1
Credit spread	3	3	6	8	4	5	6	5
Diversification [2]					–8	–8	–13	–6
Total VaR	**5**	**5**	**16**	**15**	**9**	**8**	**13**	**6**

1 The total VaR for the columns Minimum and Maximum cannot be calculated by taking the sum of the individual components since the observations for both the individual markets as well as total VaR may occur on different dates.

In order to make sure that all the tables in the Market risk in trading books are aligned, the scope of all the tables has been set to include all portfolios that are part of the trading book regulatory capital for both 2018 and 2017. In the Annual report of 2017 the table above included only the portfolios that are part of ING's Financial Markets business line.

In 2018, the average VaR was at a slightly higher level compared to 2017. Over 2018, due to position changes the trading portfolio saw an increase in the Foreign Exchange asset class.

Position changes in the portfolio led to higher minimum, average and maximum values for both the 10 day Historical VaR and 10 day Stressed VaR in 2018 compared to the statistics over the whole of 2017. The overall decrease in IRC in 2018 was largely caused by decreased debt exposures to a number of sovereigns and commercial banks.

EU MR3: Internal Model Approach values for trading portfolios

amounts in millions of euros		2018	2017
VaR (10 day 99%)			
1	Maximum value	46	43
2	Average value	25	22
3	Minimum value	15	14
4	Period end	40	17
Stressed VaR (10 day 99%)			
5	Maximum value	139	96
6	Average value	73	56
7	Minimum value	41	33
8	Period end	124	67
Incremental Risk Charge (99.9%)			
9	Maximum value	107	158
10	Average value	62	114
11	Minimum value	40	78
12	Period end	58	78
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 VaR, SVaR, and IRC models, where diversification is taken into account. Foreign exchange risk from the banking 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

The market risk regulatory capital under Standardized Approach is fully driven by the foreign exchange risk in the banking books. The foreign exchange risk in the banking books in 2018 increased slightly compared to 2017.

EU MR1: Market risk under Standardised Approach

amounts in EUR millions		2018 RWA	2018 Capital requirements	2017 RWA	2017 Capital requirements
Outright products					
1	Interest rate risk (general and specific)				
2	Equity risk (general and specific)				
3	Foreign exchange risk	1,131	90	1,074	86
4	Commodity risk				
Options					
5	Simplified approach				
6	Delta-plus method				
7	Scenario approach				
8	Securitization (specific risk)				
9	**Total**	**1,131**	**90**	**1,074**	**86**

Internal Model Approach

Market risk Regulatory Capital increased during 2018 compared to 2017. The increase is mainly the result of risk position changes that resulted in higher VaR and Stressed VaR numbers. The increase is offset by a decrease in IRC, which is the result of decreased debt positions in sovereigns and financials.

EU MR2-A: Market risk under Internal Model Approach

amounts in EUR millions		2018 RWA	2018 Capital requirements	2017 RWA	2017 Capital requirements
1	**VaR (higher of values a and b)**	**1,394**	**112**	**649**	**52**
(a)	Previous day's VaR (Article 365(1) (VaRt-1))	529	42	209	17
(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)	1,394	112	649	52
2	**SVaR (higher of values a and b)**	**3,217**	**257**	**1,750**	**140**
(a)	Latest SVaR (Article 365(2) (sVaRt-1))	1,486	119	842	67
(b)	Average of the SVaR (Article 365(2) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366)	3,217	257	1,750	140
3	**Incremental risk charge -IRC (higher of values a and b)**	**767**	**61**	**1,205**	**96**
(a)	Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)	727	58	981	78
(b)	Average of the IRC number over the preceding 12 weeks	767	61	1,205	96
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**	**5,378**	**430**	**3,604**	**288**

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 foreign exchange trading positions, and interest rate and credit spread sensitivities. The credit spread sensitivities are furthermore split in different risk classes and sectors. Due to the nature of the trading portfolios, positions change from day to day.

Most important foreign exchange year-end trading positions[1]

amounts in EUR millions	2018		2017
Foreign exchange		Foreign exchange	
US Dollar	–957	US Dollar	–144
Chinese Yuan Renminbi	–18	Polish Zloty	29
Swiss Franc	–14	South Korean Won	26
Polish Zloty	14	Japanese Yen	–21
South Korean Won	14	Taiwan New Dollar	21

1 In order to make sure that all the tables in the Market risk in trading books are aligned, the scope of all the tables has been set to include all portfolios that are part of the trading book regulatory capital for both 2018 and 2017. In the Annual report of 2017 the table above included only the portfolios that are part of ING's Financial Markets business line.

Most important interest rate and credit spread sensitivities at year-end[3]

amounts in EUR thousands	2018		2017
Interest Rate (BPV)[1]		**Interest Rate (BPV)[1]**	
Euro	–214	US Dollar	292
US Dollar	189	Russian Ruble	–65
Great-Britain Pound	–112	Japanese Yen	61
Taiwan New Dollar	96	Taiwan New Dollar	52
Polish Zloty	54	Great-Britain Pound	–45
Credit Spread (CS01)[2]		**Credit Spread (CS01)[2]**	
Germany	345	United States	464
United States	330	France	164
Russian Federation	177	United Kingdom	144
Netherlands	164	Supranational	–92
France	151	Germany	89

1 Basis Point Value (BPV) measures the impact on value of 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 1 basis point increase in credit spreads. Exposures to supranational institutions are not assigned to a specific country.
3 In order to make sure that all the tables in the Market risk in trading books are aligned, the scope of all the tables has been set to include all portfolios that are part of the trading book regulatory capital for both 2018 and 2017. In the Annual report of 2017 the table above included only the portfolios that are part of ING's Financial Markets business line.

Credit spread sensitivities per risk class and sector at year-end[2]

amounts in EUR thousands	2018 Corporate	2018 Financial Institutions	2017 Corporate	2017 Financial Institutions
Credit Spread (CSO1) [1]				
Risk classes				
1 (AAA)	–6	90	–19	–233
2–4 (AA)	3	–24	4	–35
5–7 (A)	117	78	–19	79
8–10 (BBB)	245	–2	87	–23
11–13 (BB)	85	6	–70	–90
14–16 (B)	37	13	–12	–
17–22 (CCC and NPL)	18	–	–2	1
Not rated	1	–	3	–
Total	**500**	**161**	**–28**	**–300**

1 Credit Spread Sensitivity (CS01) measures the impact on value of a 1 basis point increase in credit spreads.
2 In order to make sure that all the tables in the Market risk in trading books are aligned, the scope of all the tables has been set to include all portfolios that are part of the trading book regulatory capital for both 2018 and 2017. In the Annual report of 2017 the table above included only the portfolios that are part of ING's Financial Markets business line.

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 this graph.

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, the ICLAAP Committee 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 Commercial 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 and maintaining access to the short and long term professional funding and by managing the liquidity buffer. Commercial Business lines are responsible for managing the funding and liquidity requirements from the originated business.

The second line Financial Risk function, both locally and at group level, is responsible for developing and maintaining ING's policies, standards, guidelines and risk appetite for F&L risk management. Furthermore, the Financial Risk function measures funding & liquidity risks, is responsible for stress testing activities and controls the liquidity requirements related to commercial products. The Finance function is responsible for reporting and providing management information related to funding and liquidity management.

Funding & 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 under both normal market circumstances and in times of stress across various geographies, maturities and currencies. This requires a diversified funding structure that takes into account all relevant opportunities and constraints.

ING's funding consists mainly of retail and corporate deposits contributing 50% and 21% of the total funding respectively. These funding sources provide a relatively stable funding base. The remainder of the required funding is attracted by Group Treasury through long term and short term professional funding. Group Treasury manages the professional funding in line with the risk appetite ensuring sufficiently diversified and stable funding.

ING Bank Funding Mix[1]

	2018	2017
Funding type		
Customer deposits (retail)	**49%**	51%
Customer deposits (corporate)	**24%**	23%
Lending/repurchase agreement	**7%**	6%
Interbank	**5%**	5%
CD/CP	**6%**	4%
Public debt	**8%**	9%
Subordinated debt	**2%**	2%
Total	**100%**	100%

1 Liabilities excluding trading securities and IFRS equity

In 2018, customer lending growth outpaced customer deposit growth. As a result, the reliance on professional funding activities increased as the additional lending growth was funded through short term CD/CP issuance. The Loan-to-Deposit ratio at year-end 2018 has increased to 1.07 from 1.05 in 2017.

The long term debt is diversified across maturities and currencies. The main part of it is EUR or USD denominated which is in line with the currency composition of customer lending.

Funding & liquidity adequacy and risk appetite

ING Bank distinguishes several key drivers of future liquidity and funding needs:

- The boundaries set by current and future regulatory requirements;
- The boundaries set by risk appetite statements (EUR and USD currency);
- The findings from various stress tests;
- The boundaries regarding the distribution and transferability of liquidity; and
- Any funding/refinancing needs.

Based on all these perspectives, ING Bank assesses the current and future adequacy of its liquidity position and, if deemed necessary, takes steps to further improve the position with the aim to ensure that ING Bank has sufficient counterbalancing capacity. That is achieved through the quarterly update of the Liquidity Adequacy Statement and the execution of the ILAAP process.

ING has a Funding & Liquidity framework in place such that ING has sufficient liquidity under normal, adverse and stressed market circumstances. In general, ING considers the adequacy of its F&L position through three main lenses: (i) Stress, (ii) Sustainability and (iii) Regulatory.

(i) Through the Stress lens ING considers its ability to withstand a period of prolonged F&L stress, either idiosyncratic, market related or a combination of both, leading to customer deposit outflow or reduced access to funding markets;
ii) Through the Sustainability lens ING assesses the extent to which our customers, professional counterparties and investors are comfortable providing funding in tenors, currencies and instruments that ING needs to sustainably fund its business (intraday, short term and long term) in a going concern situation;
(iii) Through the Regulatory lens ING ascertains that it is in the position to meet current and forthcoming regulatory requirements.

For each lens, ING has in place a set of risk appetite statements which define its risk appetite profile commensurate with the principles of liquidity adequacy. These are summarised in the next graph.

Funding and Liquidity Adequacy

Stress

The bank's counter-balancing capacity should be sufficient in adverse and stressed market circumstances	The 'time to survive' in a F&L stress situation must be sufficient

Sustainable

Funding of longer term assets and investments must be done by stable and longer-term liabilities	Funding of short term assets may not lead to too much dependency on short term professional markets	Diversification must be in place of funding profile, across funds providers, instrument types, geographic markets, tenors and currencies	Geographic dependencies with respect to intra-group funding are to be limited	The Bank should be able to meet payment and settlement obligations on a timely basis

Regulatory

We comply with home and host regulatory funding & liquidity requirements

F&L Framework

These risk appetite statements are subsequently translated into a number of metrics with appropriate boundaries and instruments that are used to measure and manage ING's funding and liquidity adequacy.

For the stress lens, the risk appetite is set such that there is sufficient counterbalancing capacity in the form of liquid assets under different internally defined stress scenarios. From the Sustainability perspective, an internally defined Stable funding to Loans ratio (supplemented by other metrics) is used to have a diversified funding base and to prevent overreliance on (short term) professional funding. Finally, the regulatory metrics Liquidity Coverage Ratio (LCR) and NSFR (Net Stable Funding Ratio) are monitored to comply with ING's risk appetite and with regulatory requirements.

The LCR is a measure that compares the available buffer of High Quality Liquid Assets (HQLA) to Net outflows (Outflows- Inflows) in a 30-day stress scenario defined by the regulator. The liquidity

buffer of ING is part of the counterbalancing capacity which serves as a cushion for liquidity needs under normal and stressed conditions.
The liquidity buffer consists mainly of 'Level 1' assets which are the most liquid ones and are predominantly represented by government or central bank assets. 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 is determined by ING's risk appetite and regulatory liquidity requirements.

The Macroeconomic and Market environment are important considerations in the Funding and Liquidity Framework.
Shifts in the macroeconomic environment are exogenous factors that ING has no control over but which may have a material impact on the F&L position both in terms of the strategic goals and in terms of the risk framework. The main macroeconomic factors which are analysed on a regular basis include:

- Global and local economic performances such as shifts in GDP, the inflation rate, unemployment rates and public deficit/surplus;
- Changing geopolitical trends;
- Monetary policy with special focus on the impact of eventual reversal of unconventional measures taken by central banks in recent years on ING's F&L position; and
- Regulatory requirements: understanding of the changing regulatory landscape and of the different, sometimes contradicting, effects ING's actions have on regulatory boundaries.

In terms of the market environment, the strategic ambitions of ING, together with the design and execution of funding plans, are always considered under current and projected market conditions. Key emphasis is placed on understanding overall market trends and developments, credit ratings and peer comparison.

Liquidity Stress Testing

The Funding & Liquidity Stress Testing forms part of the overall Funding & Liquidity 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/or under which scenarios.

The scope of the Funding & Liquidity Stress Testing framework includes the funding and liquidity risks of the consolidated balance sheet of ING Groep N.V. including all entities, business lines, on- and off-balance sheet positions as well as contingent assets and liabilities. The Net Liquidity Position (NLP) and Time-to-Survive (TTS) are two pre-determined output metrics both of which are affected as a result of the application of specific scenarios and parameters.

The Funding & Liquidity Stress Testing framework distinguishes between idiosyncratic and market-wide scenarios (and a combination of the two) and differentiates between stress events that develop in a gradual or fast manner. The generic design of the Funding & Liquidity Stress Testing framework, which is based on empirical evidence supplemented with expert judgment, can easily be applied to a specific scenario for example as input for the firm-wide stress testing or reverse stress testing.

The outcomes of the stress tests are taken into consideration across all the key aspects of ING's F&L risk framework and liquidity management:

- risk appetite framework (through risk appetite statements);
- risk identification and assessment;
- monitoring of the liquidity position;
- the contingency funding plan; and
- early warning indicators.

The Funding & 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 under a particular scenario that forms part of the F&L Risk Appetite Statement. In addition, the results of the stress scenarios are monitored and evaluated on a regular basis and provide input for any follow-up on the need for additional contingency measures.

In the contingency funding plan, contingency liquidity risk is addressed which specifically relates to the organisation and planning of liquidity management in times of stress. The contingency funding plans are developed in conjunction with the ING Recovery Plan and are tested on a regular basis both centrally and at business unit level.

Non-financial risk and compliance risk

Introduction

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). The Compliance Risk Management function encompasses the FCC (Financial Crime Compliance) and RCC (Regulatory Compliance & Conduct) teams. Risk controls for these functional areas have been implemented by means of policies and minimum standards which apply to ING's business processes in the entities. ING has a system of internal controls that is reviewed and updated periodically and when necessary. ING's goal is to create an environment of continuous improvement in managing non-financial and compliance risks. There is an infrastructure in place enabling management to track events, compliance and non-financial risk issues.

ING believes that an effective control environment is essential to build and maintain sustainable businesses, and preserve and enhance the trust of its customers, employees and shareholders. The Orange Code is a manifesto that describes our way of working and sets the foundation for the ethical standards ING expects from all its employees, business activities, and partners. It is comprised of ING Values, requiring all staff to act with integrity, whilst being honest, prudent and responsible - and the ING Behaviours - our way of being that makes us different from our competitors.

Governance

The Head of Corporate ORM, Corporate IRM, IVU and CSI report to the Global Head of Non-Financial Risk. The Head of Financial Crime Compliance and the Head of Regulatory Compliance & Conduct both report to the Chief Compliance Officer (CCO).

The Global Head of Non-Financial Risk is responsible to develop 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.

The Chief Compliance Officer (CCO) is the Global Head of the Compliance Risk Management function. This is an independent function responsible for developing and establishing the Bank-wide policies and minimum standards for managing compliance risks. The CCO assists the SB, EB and MBB 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 and the Global Head of Non-Financial Risks meet regularly the Chairman of the Risk Committee of the SB.

Non-Financial Risk Committees (NFRCs) and Management Teams (MTs) measure, monitor and manage operational, information and compliance risks. The Bank NFRC is the primary approval and oversight committee for non-financial risk matters. Additionally NFRCs exist at the Division and/or Entity level providing input to the Bank NFRC. They are chaired by the first line of defence with the purpose to steer the risk management activities of the first and second lines of defence in their respective scope. Non-financial risk topics are an integral part of the agenda of regular MTs at various levels of the organisation. Since 2018, with the changes in guidelines issued by the EBA, a Group NFRC has been established covering the ING Group entities that are not in scope of the Bank NFRC.

The NFR and Compliance functions use a layered functional approach within divisions to support a systematic and consistent implementation of the framework of policies and minimum standards within ING. To avoid potential conflicts of interests, it is imperative that staff in this function are independent and objective when advising business management on non-financial or compliance risk matters in their business unit or business line. To facilitate this, a functional reporting line to the next higher level within Operational Risk Management (ORM), Information Risk Management (IRM) and Compliance Risk Management is in place. The functional reporting line has clear accountabilities with regard to objectives setting, remuneration, performance management and appointment of new staff as well as a mandate to instruct, veto and escalate.

Framework

Non-financial risk is 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. ING has a framework for non-financial risks that supports and governs the process of identifying, measuring, mitigating, monitoring and reporting non-financial and compliance risks. It reflects the stages described in the Enterprise Risk Management model of COSO (Committee of Sponsoring Organisations of the Treadway Commission).

Processes aim at identifying key threats, vulnerabilities and the associated risks which might cause adverse events. Event identification is performed and precedes a risk assessment. Different techniques for event identification exist within ING, such as Risk & Control Self-Assessments, business environment assessment, scenario analysis, internal events analyses (e.g. lessons learned based on information from event reporting), external events inventories, and monitoring.

Risk & Control Self-Assessment

Risk & Control Self-Assessment (RCSA) of non-financial risks inherent to ING products, activities, people, processes and systems provide management with an understanding of the operational risk profile. Based on the identification and assessment, internal controls are designed for the mitigation of risks to remain within the risk appetite.

Business Environment Assessment

The Business Environment Assessment (BEA) assesses internal control factors and external factors that could influence the internal and external operating environment in the future, and which may lead to unacceptable operational risk exposure and endanger achieving our strategic objectives.

Scenario analysis

Scenario analysis is a process used to consider the impact of rare, significant, yet plausible future events, taking into consideration alternative possible outcomes for those events, their severity and frequency. Input for scenario analysis includes the results of various internal and external assessments such as the BEA. Scenario analysis is an important component in the calculation of operational risk capital.

Internal events analyses

Analysis of internal non-financial loss data assists in identifying, quantifying, mitigating and monitoring operational risk exposure. It provides insight into causes and effectiveness of associated controls. Supporting the creation and sharing of Lessons Learned for significant internal events is one of the means by which NFR enhances the internal control framework of ING.

External events inventories

External non-financial loss data provides valuable information about the losses experienced by other entities outside ING, and assists ING to quantify its exposure to risk events that have not been experienced internally. External loss data is an important component in the calculation of operational risk capital.

Risk responses

Business units and departments perform regular monitoring activities, BEAs and Risk & Control Self-Assessments (RCSAs) to identify and assess risks. These are conducted with involvement of the business and their ORM, IRM, Compliance and/or Legal departments. Based on the results of the risk assessment, response measures should be determined for the identified risks beyond the risk appetite.

Risk response can be achieved through several combinations of mitigation strategies, for example, reducing the likelihood of occurrence, reducing the impact, risk avoidance, risk acceptance or through the transfer of risk. Tracking takes place through ING's global action tracking system iRisk.

Risk appetite and reporting

The specific Non-Financial Risk appetite (defined as the acceptable and authorised maximum level of non-financial risk) is approved by the MBB based on a proposal made by the Bank NFRC. Adherence to this risk appetite is monitored quarterly through the NFR Dashboard which reports the key non-financial risk exposures. The NFR Dashboard provides management at country, divisional and bank level with an overview of key risks within the non-financial risk areas including compliance risks, information security risks, continuity risks, control & processing risks, fraud risks, unauthorised activities risks, and personal and physical security risks, enabling management to focus and set priorities.

The yearly objective setting process for both business management and NFR professionals aims to keep improving the management of non-financial and compliance risks throughout ING to safeguard that ING stays in control of its current and future non-financial and compliance risks.

The Non-Financial Risk reporting deliverables consist primarily of the quarterly Non-Financial Risk Dashboard (NFRD) report and a monthly NFRD booklet. The iRisk system serves as the single source of truth for NFR and Compliance risk management information and supports the three lines of defence in their Risk Management and Reporting activities.

Advanced Measurement Approach (AMA)

ING has an Operational Risk Capital model in place in which the risk profile is closely tailored to its internal risk profile and its divisions, by using scenario data for capturing severe unlikely risks and internal losses, and RCSA data for capturing day-to-day risks. The business has a leading role in assessing scenario severities, with the ORM function validating and challenging the results. The internal data are combined with external loss data (ORX) in the AMA capital calculation. Since April 2013, ING is allowed to use its AMA model for regulatory capital calculation purposes. ING reports the regulatory capital numbers on a quarterly basis.

Risk mitigations

ING is currently not using any insurance or risk transfer mechanisms for the mitigation of risk in the context of the AMA capital calculation.

Operational risk

Definition

Operational risk is defined as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events.

Risk categories

ING categorises operational risks in a number of risk 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 organisation 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.

Operational risk includes the related risk of reputation loss, as well as legal risk; strategic risks are not included. Reputational risk is defined as the possibility that adverse publicity regarding ING's business practices and associations, whether accurate or not, will cause a loss of confidence in the integrity of ING. Reputational risk is multidimensional and reflects the perception of other market participants, like customers, counterparties, shareholders, investors or regulators that can adversely affect ING's ability to maintain existing, or establish new, business relationships and continued access to sources of funding (e.g. through the interbank or securitisation markets).

Legal risk is defined as the risk related to (i) a failure (or perceived failure) to adhere to applicable laws, regulations and standards, (ii) contractual liabilities or contractual obligations that are defaulted or cannot be enforced as intended, or are enforced in an unexpected or adverse way, and (iii) liability towards third parties due to an act or omission contributable to ING (potentially) resulting in impairment of ING's integrity, leading to damage to ING's reputation, legal or regulatory sanctions, or financial loss.

Given the heavy reliance on IT systems in financial institutions, controls that monitor the various aspects of IT risk, such as integrity and confidentiality, are embedded in ING's risk and control framework.

Business Continuity Management Framework

The Business Continuity Management (BCM) policy and its accompanying minimum standard establish the principles, governance and framework around which BCM capability is designed, built and maintained such that ING is prepared to respond to a variety of external and internal disruptive events and can effectively recover from a severe business disruption at pre-defined service levels. ING's BCM life-cycle is a business driven process.

Main developments in 2018

Cybercrime & Fraud

- Cybercrime remains a significant threat to ING with attack methodologies capable of rapidly evolving to adapt to new or enhanced security measures. Relatively unskilled, criminally motivated hackers are increasingly adopting the tactics, techniques and procedures (TTPs) typically used by more sophisticated nation-stated backed adversaries. Moreover, evidence suggests that sophisticated techniques are becoming more widely commoditised. In 2018 an uptick in “Cybercrime-as-a-Service” made large scale DDoS or phishing attacks increasingly affordable and available for threat actors of all capability levels.
- Controls 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 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 Cyber Security Center) and internet service providers (ISPs).
- Concerns over the potential impact of insider threat continues to increase but specific information relating to instances or trends in the financial industry remains limited.
- The increasing use of third party vendors for services and the implementation of PSD2 is likely to represent fraud management and IT security challenges in the short term as criminal actors target financial data outside the traditional banking environment.
- Dealing with current and upcoming fraud threats effectively requires continuous improvement of fraud prevention methodologies, automated fraud detection and better alignment of cross border fraud response across ING.

User Access Management (UAM)

User Access Management (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 User Access Management 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 process will continue to mature, with attention to standardization, harmonisation of processes, day to day practices and further automation of UAM controls.

Outsourcing Risk

In 2018, a new Sourcing Policy became effective which outlines the inherent critical and high risks that can materialise during the sourcing life-cycle and the control objectives to effectively mitigate these risks. In addition the 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. In the second half of 2018, ING provided input to the EBA, via European Banking Forum (EBF), during the consultation round of its draft Guidelines on Outsourcing. In 2019 NFR will perform a gap-analysis on the final guidelines in order to identify and implement additional requirements.

Compliance risk

Definition

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 Values as part of the Orange Code. We aim to effectively manage compliance risks that could expose ING to reputational damage, fines, civil and criminal penalties, payment of damages, court orders and suspension or revocation of licenses that would adversely impact our customers, staff, shareholders and other stakeholders.

The Compliance Risk Management function established a compliance control framework in which controls are defined based on laws, regulations, and standards that are part of the internal control framework of ING applicable to non-financial risks. To support management in mitigating compliance risks, the Compliance Risk Management function supports training and advises the business in managing compliance risks related to e.g. money laundering, terrorist financing, sanction and export control compliance, conflicts of interests, misselling, corruption and protection of customers' interests, Financial Account Tax Compliance Act (FATCA), Common Reporting Standard (CRS), and US withholding tax and information reporting regulations.

Risk categories

ING categorises compliance risk into four conduct-related integrity risk areas:
- *Client conduct* refers to the compliance risks arising from the relationship with or generated by the conduct of our clients 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 also to the compliance risks relating to FATCA, CRS, and US withholding tax and information reporting regulations;
- *Personal conduct* refers to the compliance risks arising from the conduct of ING employees;

- *Financial Services* conduct refers to the compliance risks arising from or generated by the conduct of ING when developing, marketing and/or selling products and services to its clients; and
- *Organisational conduct* refers to the compliance risks arising from the way the Bank is organising itself to develop its activities. This category covers for instance the licences required to perform its regulated banking activities.

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 periodically, and senior management has the responsibility that their 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 ING Orange Code, any ING policy and/or any applicable law, regulation or code, can be reported anonymously in line with the Whistle-blower Policy, via internal or external channels next to normal reporting channels.

Financial Economic Crime (FEC) Policy and Minimum Standards

The FEC Policy and Minimum Standards reflect relevant national and international laws, regulations and industry standards. The FEC Policy is mandatory and applies to all ING entities, majority owned ING business, businesses under management control, staff departments, product lines and to all client engagements and transactions.

Management of ING entities maintain local procedures aiming at enabling them to comply with local laws, regulations and the FEC Policy and Minimum Standards. Where local laws and regulations are more stringent, the local laws and regulations are applied. Likewise the FEC Policy and Minimum Standards prevail when the standards therein are stricter than stipulated in local laws and regulations and if not specifically forbidden.

The FEC Policy and Minimum Standards set the requirements for all ING entities to guard against involvement in criminal activity. The requirements in the FEC Policy cover minimum standards and controls related to: money laundering, terrorist financing, export trade controls, proliferation financing, sanctions (economic, financial and trade) and countries designated by ING as Ultra High Risk Countries (UHRC).

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. Each of these countries is subject to EU and/or US sanctions regimes. Iran, Sudan, and Syria are identified by the US as state sponsors of terrorism and are subject to US economic sanctions and export controls.

Main developments in 2018

Regulatory developments

Compliance with applicable laws and regulations is resource-intensive. Banks continue to be faced with new and increasingly onerous regulatory requirements, and we expect the scope and extent of regulations in the jurisdictions in which we operate to generally increase further.

Regulation is becoming increasingly more extensive and complex. An example is the implementation of the Common Reporting Standard (CRS), which like FATCA requires financial institutions to report detailed client-related information to the competent authorities. Customer due diligence (CDD) and transaction monitoring impose obligations on financial institutions to maintain appropriate policies, procedures and controls to detect, prevent and report money laundering , terrorist financing, and fraud.

Despite our efforts to comply with applicable laws and regulations, there are a number of risks in areas where applicable regulations are unclear, or under development, are in conflict with each other, or where regulators revise their guidance or courts set new legal standards. Meeting these requirements within the strict timelines that are set poses a significant challenge for banks. ING will continuously work on embedding in our IT systems and data the processes and procedures needed for effective compliance and developing its people to have the right knowledge and skills.

4th AML Directive

The 4th AML Directive, as issued by the European Union, has been incorporated into the update of the ING Financial Economic Crime Policy and Minimum Standards, which has been renamed Know Your Client (KYC) Policy, incorporating also KYC-related requirements of the FATCA/CRS policy, as well as certain elements of the Environmental Social Risk policy. The main changes in this Directive (compared to the 3rd AML Directive) are related to: the establishment of an Ultimate Beneficial Owner (UBO) register (at national level with the potential to share the information within the European Economic Area (EEA)) and a stronger approach towards the application of due diligence on ING's customers. The implementation date of the Directive was 26 June 2017. The implementation of the directive into Dutch law has taken place in July 2018.

On 5 July 2017 the European Commission presented a new proposal for a Directive amending the 4th AML Directive (so called 5th AML Directive). The aim of the proposal is to tackle new means of terrorist financing, increase transparency to combat money laundering and help strengthen the fight against tax avoidance. On 8 June 2018, the EU Council adopted its position on the proposed Directive.
In addition, the European Supervisory Authorities (ESAs) issued their final Guidelines on risk factors on 26 June 2018, which became applicable by 26 June 2018. These Guidelines promote a common understanding of the risk-based approach to AML/CFT and set out how it should be applied in the context of the 4th EU AML Directive. Furthermore, on 22 September 2018 the ESAs also issued their final Guidelines to prevent the abuse of funds transfers for terrorist financing and money laundering purposes. These guidelines applied from six months after the date on which they are issued.

FEC/KYC

In September 2018, ING was impacted by the EUR 775 million settlement agreement with the Dutch Public Prosecution Service related to the previously disclosed criminal investigations that found serious shortcomings in the execution of customer due diligence requirements to prevent financial economic crime at ING Netherlands in the period investigated (2010-2016).

The implementation and execution of policies and procedures related to anti-money laundering (AML) is an ongoing activity. In addition, ING has taken a number of specific measures to strengthen its management of compliance risks and address the root causes of the shortcomings. These measures are being implemented as part of the bank-wide, global Know Your Customer (KYC) Enhancement Programme, a multi-year improvement programme with integral steering. This specific programme was officially launched early in 2017 and is expected to run until end-2020. ING is committed to periodically providing the Dutch central bank (DNB) with regular updates on the progress made.

The KYC Enhancement Programme encompasses all client segments in all ING business units, leveraging on experiences from the enhancement programme already started in the Netherlands. The programme consists of three parts: (a) look-back analysis on past deficiencies in post-transaction monitoring. The look-back analysis consists of screening of transactions executed in the past. In case unusual transactions are identified, ING is committed to following the applicable reporting process; (b) enhancement of customer due diligence files with the aim to document sufficiently the knowledge the bank has about its clients in the line with past and new requirements; (c) structural solutions that should support getting sustainably better in addressing money laundering risks in our portfolio and complying with laws and regulations.

The structural solutions comprise five pillars:
- **Development and global roll-out of KYC risk appetite statements, KYC risk assessments on clients, capability structure and maturity assessments**. Setting acceptance criteria based on which clients are on-boarded, transactions are processed or taxes are withheld. This pillar covers

also the use of a uniform risk assessment methodology for KYC-related integrity risks and a common taxonomy to measure effectiveness.

- **Development and global roll-out of a bank-wide KYC digital service platform**, including processes and tooling around CDD, screening and workflow management. This includes the fulfilment of the client acceptance and maintenance life cycle within one global digital platform. All required screening components (name screening, pre-transaction screening, adverse media screening) will be incorporated into the client acceptance due diligence process. Once a customer is onboarded, ongoing screening and monitoring of transactions can then be activated.
- **Translation of 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 (FEC) and client activity monitoring (CAM) scenarios per entity, the building of the alert definitions (including data feeds) and migration to a central tool where relevant and possible, and validating and testing the approach from risks to alerts.
- **Set up central KYC organisation that defines standards and drives global execution and improvements**. This includes the set-up of the new KYC organisation now in place. As of 4Q 2018, we have strengthened the KYC governance by including the heads of the business lines in the KYC Committee. Going forward we will further develop the global KYC function to ensure structural embedding of standardised and uniform ways of working, with regular improvement cycles and support of advanced technologies and insights.
- **Develop and rollout KYC communication and awareness initiatives and set up a behavioural risk department that performs risk assessments**. In its internal communications, ING has made it clear that non-financial risk and compliance are just as important as financial risk and will be embedded in ING's DNA. An online training module to enhance awareness of KYC was rolled out to all employees worldwide. MBB members spent a considerable amount of time engaging with staff to explain and discuss our responsibility as gatekeepers of the financial system. In these meetings, the impact of the settlement, the root causes, the shortcomings and our commitment and efforts to enhance were discussed. ING started behavioural risk assessments during which more than 100 interviews were held and more than 200 surveys were done to understand better how people, teams and departments interact and work together. Based on these insights, actions for improvement will be considered.

ING recognises that fighting Financial Economic Crime requires close cooperation with other banks and supervisory and regulatory authorities. ING is therefore working with the Dutch Banking Association (NVB) and the Dutch central bank (DNB) on harmonising efforts in the fight against FEC and participates actively in various working groups and project teams in this area. As such, ING actively participates in public-private partnerships to combat FEC, such as participating in the FEC Council PPS ('FEC-RAAD Public Private Cooperation') in which Dutch authorities and financial institutions cooperate on supervision, control, prosecution or investigation with financial sector parties to strengthen the integrity of the sector. This is done by means of preventative action to identify and combat threats to integrity. ING believes that introducing clear accountabilities and standard processes across the financial industry will allow ING to manage and control KYC activities and integrity risks more effectively.

As previously noted, in connection with the above-mentioned investigations ING also received information requests from the US Securities and Exchange Commission (SEC). ING has received a formal notification from the SEC that it has concluded its investigation and, based on the information at that time, the Division of Enforcement does not intend to recommend SEC enforcement action against ING.

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% 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 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 passes the information to the IRS.

If the Bank cannot rely on IGA or satisfy the requirements, certain payments to the Bank 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 Bank'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 Bank's compliance costs. Failure to comply with FATCA and other US withholding tax regulations could harm our reputation and could subject the Bank to enforcement actions, fines and penalties, which could have a material adverse effect on our business, reputation, revenues, results of operations, financial condition and prospects.

In December 2018, the US IRS released proposed regulations that aim to reduce taxpayer burden with respect to certain requirements under Chapter 3 and Chapter 4 (FATCA) of the US code.

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 jurisdictions adhering to CRS. As of 29 October 2018, 104 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. Other signatory countries commenced their information exchange in 2018.

In 2018, the OECD has introduced two 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 need to monitor cross-border arrangements already as of 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) came into effect in January 2018. A central programme continued in 2018 to support ING's commitment to embed the revised legislation throughout the organisation.

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 2018 ING continued its central programme, which was initiated in 2016, to implement these GDPR standards.

Awareness & Learning

Promoting Integrity Programme

The Promoting Integrity Programme was started in 2010 and consists of e-learning modules on key bank-wide topics that can be followed-up with dialogue sessions in which managers discuss the issues raised with their teams. The programme is sponsored by board members and senior managers and is created for the benefit of every employee in every part of ING to enhance the understanding of how their actions and behaviour can help earn and retain customer and stakeholder trust. In 2018, integrity led behaviour was addressed by means of the mandatory PIP e-learning 'Dealing with Dilemmas' and 'Data@Risk' which were rolled out globally.

Compliance Forum ING

In 2018, we continued training the Compliance Officers within ING worldwide in the Compliance Forum ING. This forum is about building expertise and sharing experience. The focus is on regulatory developments, innovation and the future of compliance – what compliance officers can do to Think Forward. Participants are engaged in lively discussions on current topics, take part in workshops and plenary sessions to experience and develop the new ways of working within ING. Participants can connect with colleagues from across the globe and share knowledge and views on the compliance function of the future. Part of the Compliance community was trained in 2017 and in 2018 the remainder has been trained.

Speak-up

A speak-up awareness campaign was launched for all ING Bank employees to enhance the awareness to raise any concern related to breaches of the Orange Code, any suspected or actual criminal conduct, unethical conduct or other misconduct by or within ING. The awareness campaign was supported by the launch of a revised whistleblower policy and a mandatory global e-learning.

Compliance Risk Culture Monitoring

The Compliance Risk Management function continued to enhance its control framework by monitoring on drivers for conduct or the 'soft controls'. By assessing both hard controls and soft controls, such as leadership, group dynamics and decision making via in-depth interviews with ING staff, ING further strengthens the mitigation of compliance risks and provides management with knowledge and tools how to further develop a sound risk and integrity-led culture throughout the global ING organisation. In addition to Compliance Risk Culture Monitoring, ING is further developing in the area of hard control monitoring on the Orange Code values.

Dilemma Dialogue

As also stated in our Orange Code, balancing the rights and interests of all involved is key to ongoing viability of the bank. ING employees are expected to take the time and effort to reflect on dilemmas or difficult decisions they have to take, and to do so in a sustainable manner. To support this ING enrolled the Orange Code Dilemma Dialogue model. This is a decision making model that takes employees through the steps of analysing an issue or dilemma, defining stakeholders, listing arguments and weighing them to make clear what in the specific case is the right thing to do. The launch of the Dilemma Dialogue model was supported by a mandatory e-learning for all staff and additional training to all compliance staff to enable them to facilitate the dialogue on dilemmas in their own local business unit.

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 the (inflexibility) to adjust 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 Statements regarding business risk, focusing on earnings stability and diversification of the business mix, as avoiding to put 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 also mitigated and managed in a different way. 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.

51 Capital management

Objectives

Group Treasury ("GT") is the result of a merger between Capital Management and Bank Treasury which was approved by the ING management board in 2017. The merger is a logical continuation of the efforts that were done since the creation of Bank Treasury in 2011 to streamline ING's operations related to capital, funding, liquidity and balance sheet management.
This empowers GT to manage the balance sheet holistically. GT covers the full spectrum all the way from day-to-day operational management to the more strategic advisory function, and all the way from cash management, to liquidity and funding management to solvency and capital management.
GT Capital Management, part of the 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 Capital Management takes into account both regulatory and internal 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 - Common Equity Tier 1 (CET1) capital is defined as shareholders' equity less regulatory adjustments. CET1 capital divided by risk-weighted assets equals the CET1 ratio.
- Tier 1 capital – Tier 1 capital is defined as CET1 capital including 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 – Total capital is Tier 1 capital including 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 – 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) as described in the Risk Management section.
- Leverage ratio – Leverage ratio is defined as Tier 1 capital divided by the total exposure amount.
- Bail-inable capital – Total capital, Senior HoldCo and Opco debt qualify as Bail-inable capital.

ING also applies the following risk appetite definitions:
- RAF – Risk appetite framework which includes Solvency, Liquidity & funding risk, Credit risk, Market risk and Non-Financial risk appetite statements
- FX ratio hedging – the objective is to protect the Common Equity Tier 1 ratio of ING consolidated figures against FX fluctuations.
- Capital investment hedge.

Developments
The capital position remained robust in 2018 reflecting strong profitability based on core lending growth, with a lower risk weight and complemented with the optimisation of the capital structure.

ING Bank N.V. has a fully-loaded Common Equity Tier 1 ratio and a phased-in Common Equity Tier 1 ratio of 12.9%, thereby complying with CRR/CRD IV solvency requirements. ING Bank N.V. paid €2,517 million of dividend to ING Group in 2018. The fully loaded in Tier 1 ratios (including grandfathered securities) decreased from 14.7% to 14.5%, while the phased-in Tier 1 ratio (including grandfathered securities) remained stable at 14.6%, primarily reflecting developments in ING Bank's Common Equity Tier 1 ratio. The Banks's fully loaded and phased-in total capital ratio (including grandfathered securities) decreased from 18.3% to 17.2% and 18.2% to 17.2%, respectively.

Policies
The activities of Capital Management are executed on the basis of established policies, guidelines and procedures. For Debt and Capital Issuance there are additional policies and limits that guide the execution of capital market transactions.

Processes for managing capital
Besides measuring capital adequacy, Capital Management also ensures the availability of sufficient capital through target and limit setting for the above mentioned metrics for ING Group and ING Bank. Additionally, 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. Following 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 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 strategy.

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.

Capital adequacy assessment

As at 1 January 2014, the CRR/CRD IV capital rules entered into force. The capital position table reflects own funds according to the Basel 3 rules as specified in the CRR/CRD IV. As CRD IV will be phased-in gradually until 2019, the table shows the CRD IV positions according to the 2019 end-state rules and the 2018 rules. ING reports these metrics for ING Group and ING Bank. During 2018, ING Group and ING Bank were adequately capitalised.

ING Bank NV capital position according to CRR/CRD IV

	(fully-loaded)		(phased-in)	
	2018	2017	2018	2017
Shareholders' equity	44,173	43,662	44,173	43,662
Interim profit not included in CET1 capital[1]	-174	-44	-174	-44
Other adjustments	-3,621	-3,043	-3,568	-3,017
Regulatory adjustments	-3,794	-3,087	-3,742	-3,061
Available common equity Tier 1 capital	**40,379**	**40,576**	**40,431**	**40,602**
Additional Tier 1 securities[2]	5,179	4,989	5,179	4,989
Regulatory adjustments additional Tier 1	62	53	62	-374
Available Tier 1 capital	**45,619**	**45,618**	**45,671**	**45,217**
Supplementary capital Tier 2 bonds[3]	8,248	11,086	8,248	11,086
Regulatory adjustments Tier 2	66	47	69	-44
Available Total capital	**53,933**	**56,751**	**53,988**	**56,259**
Risk weighted assets	313,572	309,287	313,572	309,287
Common equity Tier 1 ratio	12.88%	13.12%	12.89%	13.13%
Tier 1 ratio	14.55%	14.75%	14.56%	14.62%
Total capital ratio	**17.20%**	**18.35%**	**17.22%**	**18.19%**

1 The interim profit not included in CET1 capital as per 31 December 2018 (€174 million) includes €44 million for 4Q 2018 (Full year 2018: €2,646 million).
2 Including €3,271 million which is CRR/CRD IV-compliant (2017: €3,123 million) and €1,907 million to be replaced as capital recognition is subject to CRR/CRD IV grandfathering rules (2017: €1,866 million).
3 Including €8,079 million which is CRR/CRD IV-compliant (2017: €8,995 million), and € 168 million to be replaced as capital recognition is subject to CRR/CRD IV grandfathering rules (2017: €2,091 million).

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 all risk-weighted assets.

ICAAP/SREP process

Annually, ING provides in-depth documentation on its Internal Capital Adequacy Assessment Process (ICAAP) in the scope of ECB's Supervisory Review and Evaluation Process (SREP). This submission includes all ICAAP related documentation such as information on ING's internal capital models, risk measurement, assessment and aggregation, risk appetite framework, capital planning both under base case and adverse scenarios including stress testing. Based on this documentation and continuous supervisory dialogue, the ECB conducts the SREP assessment of ING and its main subsidiaries. This assessment covered four areas: business model, internal governance and risk management, risks to capital and risks to liquidity and funding on a yearly basis.

Ratings

Main credit ratings of ING at 31 December 2018

	Standard & Poor's		Moody's		Fitch	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
ING Bank N.V.						
Long-term	A+	Stable	Aa3	Stable	A+	Positive
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 Annual Accounts

Amsterdam, 4 March 2019

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
H.W. (Henk) Breukink
M. (Mariana) Gheorghe
M. (Margarete) Haase
R.W.P. (Robert) Reibestein

The Management Board Banking

R.A.J.G. (Ralph) Hamers, CEO and chairman of the Management Board Banking
T. (Tanate) Phutrakul, CFO
S.J.A. (Steven) van Rijswijk, CRO
M. I. (Isabel) Fernandez Niemann, head of Wholesale Banking
R.M.M. (Roel)Louwhoff, COO/CTO
A. (Aris) Bogdaneris, head of Challengers & Growth Markets
R.B. (Roland) Boekhout, head of Market Leaders

Parent company statement of financial position

as at 31 December before appropriation of result

in EUR million	2018	2017
Assets		
Cash and balances with central banks 1	30,508	7,390
Short-dated government paper 2	517	712
Loans and advances to banks 3	72,553	87,827
Loans and advances to customers 4	344,672	336,567
Debt securities 5	37,844	36,404
Equity securities 6	7,103	12,103
Investments in group companies 7	32,815	32,325
Investments in associates and joint ventures 8	932	808
Intangible assets 9	1,097	855
Equipment 10	431	412
Other assets 11	38,680	43,849
Total assets	**567,152**	**559,252**

in EUR million	2018	2017
Liabilities		
Deposits from banks 12	60,300	59,133
Customer deposits 13	315,012	306,512
Debt securities in issue 14	91,552	84,080
Other liabilities 15	41,361	48,248
General provisions 16	797	1,247
Subordinated loans	13,957	16,370
Total liabilities	**522,979**	**515,590**
Equity 17		
Share capital	525	525
Share premium	16,542	16,542
Revaluation reserves	2,187	2,898
Legal and statutory reserves	1,317	1,415
Other reserves	19,155	17,416
Unappropriated result	4,447	4,866
Total equity	**44,173**	**43,662**
Total liabilities and equity	**567,152**	**559,252**

References relate to the accompanying notes. These form an integral part of the Parent company annual accounts.

Parent company statement of profit or loss

for the years ended 31 December

in EUR million	2018	2017
Interest income	14,577	28,957
Interest expense	–8,214	–22,599
Net interest income 18	**6,363**	**6,358**
Investment income and results from participating interests 19	3,123	2,958
Commission income	1,948	1,791
Commission expense	–532	–463
Net commission income 20	**1,416**	**1,328**
Results from financial transactions 21	**655**	**314**
Other income 22	–53	120
Total income	**11,505**	**11,078**
Staff expenses 23	3,030	2,837
Depreciation and amortisation 24	244	223
Other expenses 25	2,656	1,980
Addition to loan loss provisions	137	194
Total expenses	**6,066**	**5,234**
Result before tax	**5,439**	**5,844**
Taxation 26	832	825
Result after tax	**4,607**	**5,019**

References relate to the accompanying notes. These form an integral part of the Parent company annual accounts.

Parent company statement of changes in equity

in EUR million	Share capital	Share premium	Revaluation reserves	Legal and statutory reserves	Other reserves	Unappropriated results	Total
Balance as at 31 December 2017	525	16,542	2,898	1,415	17,416	4,866	43,662
Effect of change in accounting policy			–358	–287	–393		–1,038
Balance as at 1 January 2018	525	16,542	2,539	1,128	17,023	4,866	42,624
Realised and unrealised revaluations equity and debt instruments and other revaluations			–385	–100	56		–429
Realised gains/losses transferred to the statement of profit or loss			–25	–29			–54
Changes in cash flow hedge reserve			54	288			342
Unrealised revaluations property in own use			4	–6	3		1
Remeasurement of the net defined benefit asset/liability			1	5			6
Exchange rate differences and other				–386			–386
Total amount recognised directly in equity			**–352**	**–228**	**59**		**–521**
Net result				160		4,447	4,607
			–352	**–68**	**59**	**4,447**	**4,087**
Transfer from unappropriated results					4,866	–4,866	
Dividends					–2,517		–2,517
Employee stock options and share plans					59		59
Changes in the composition of the group and other changes				256	–336		–80
Balance as at 31 December 2018	**525**	**16,542**	**2,187**	**1,317**	**19,155**	**4,447**	**44,173**

Changes in individual components are presented in Note 17 'Equity'.

in EUR million	Share capital	Share premium	Revaluation reserves	Legal and statutory reserves	Other reserves	Unappropriated results	Total
Balance as at 1 January 2017	525	16,542	3,806	1,914	16,650	4,103	43,540
Unrealised revaluations available-for-sale investments and other revaluations			–476	182			–294
Realised gains/losses transferred to the statement of profit or loss			–21	–69			–90
Changes in cash flow hedge reserve			–365	–150			–515
Unrealised revaluations property in own use			3	–2	26		27
Remeasurement of the net defined benefit asset/liability			–49	19			–30
Exchange rate differences and other				–891			–891
Total amount recognised directly in equity			**–908**	**–911**	**26**		**–1,793**
Net result				153		4,866	5,019
			–908	**–758**	**26**	**4,866**	**3,226**
Transfer from unappropriated results					4,103	–4,103	
Dividends					–3,176		–3,176
Employee stock options and share plans					69		69
Changes in the composition of the group and other changes				259	–256		3
Balance as at 31 December 2017	**525**	**16,542**	**2,898**	**1,415**	**17,416**	**4,866**	**43,662**

Changes in individual components are presented in Note 17 'Equity'.

Notes to the parent company annual accounts

amounts in millions of euros, unless stated otherwise

Basis of presentation

ING Bank N.V. is a company domiciled in Amsterdam, the Netherlands and is registered at the Commercial Register of Amsterdam under number 33031431.

The Parent company annual accounts of ING Bank 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 annual accounts are the same as those applied in the ING Bank Consolidated annual accounts, reference is made to Note 1 'Accounting policies' of the Consolidated annual accounts.
Investments in group companies are accounted 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.

Parent company equity and related reserves

The total amount of equity in the Parent company annual accounts equals Shareholders' equity (parent) in the Consolidated annual accounts. Certain components within equity are different, as a result of the following presentation differences between the parent company accounts and consolidated accounts:

- Unrealised revaluations including those related to cash flow hedges within consolidated group companies, presented in Other reserves - Revaluation reserve in the consolidated accounts, are presented in the Share of associates and joint ventures reserve in the parent company accounts;
- Foreign currency translation on consolidated group companies, presented in Other reserves - Currency translation reserve in the consolidated accounts, is presented in the Share of associates and joint ventures reserve in the parent company accounts;
- Revaluations on investment property and certain participations recognised in income and consequently presented in Retained earnings in the consolidated accounts, is presented in the Share of associates and joint ventures reserve in the parent company accounts.

A legal reserve is carried at an amount equal to the share in the results of associates and joint ventures 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 associates and joint ventures reserve.

Notes to the Parent company statement of financial position

1 Cash and balances with central banks

Amounts held at central banks amount to EUR 29,540 million (2017: EUR 6,559 million). In 2018, the movement in Cash and balances with central banks reflects ING's liquidity management.

2 Short-dated government paper

Short-dated government paper includes international government paper amounting to EUR 517 million (2017: EUR 710 million) for the company.

3 Loans and advances to banks

Loans and advances to banks

	2018	2017
Non-subordinated receivables from:		
Group companies	29,102	31,111
Third parties	41,910	55,806
	71,012	**86,917**
Subordinated receivables from:		
Group companies	1,540	867
Third parties	0	43
	72,553	**87,827**

As at 31 December 2018, Loans and advances to banks includes receivables with regard to securities, which have been acquired in reverse repurchase transactions amounting to EUR 26,858 million (2017: EUR 36,817 million).

4 Loans and advances to customers

Loans and advances to customers

	2018	2017
Non-subordinated receivables from:		
ING Groep N.V.	132	367
Group companies	50,517	52,825
Third parties	292,622	281,975
	343,272	**335,167**
Subordinated receivables from:		
Group companies	1,401	1,400
	344,672	**336,567**

As at 31 December 2018, receivables included in Loans and advances to customers that are part of the trading portfolio amount to EUR 12,081 million (2017: EUR 19,476 million).

Loans and advances to customers includes receivables with regard to securities which have been acquired in reverse repurchase transactions amounting to EUR 31,299 million (2017:EUR 22,001 million) for the company.

5 Debt securities

Debt securities by issuer

	2018	2017
Public sector	23,919	25,420
Other	13,925	10,984
	37,844	**36,404**

Debt securities analysed by listing

	2018	2017
Listed	35,462	33,961
Unlisted	2,382	2,443
	37,844	**36,404**

Debt securities – subordinated and non subordinated

	2018	2017
Non-subordinated debt securities issued by:		
Third parties	37,197	36,404
	37,197	**36,404**

Changes in debt securities (amortised cost and FVOCI)

	2018	2017
Opening balance	22,336	27,624
Effect of change in accounting policy	8,077	
Balance as at 1 January 2018	30,413	
Additions	16,606	8,396
Amortisation	–102	–93
Changes in unrealised revaluations	–259	–255
Disposals and redemptions	–16,677	–12,896
Exchange rate differences	302	–445
Other changes	–45	5
Closing balance	**30,240**	**22,336**

6 Equity securities

Equity securities analysed by listing

	2018	2017
Listed	6,895	11,890
Unlisted	208	213
	7,103	**12,103**

Changes in equity securities (excluding trading)

	2018	2017
Opening balance	2,759	2,970
Effect of change in accounting policy	–2	
Balance as at 1 January 2018	2,757	
Additions	26	254
Changes in unrealised revaluations	–572	–310
Provision for impairments		–1
Disposals	1	–9
Exchange rate differences	–16	–171
Other changes	2	26
Closing balance	**2,199**	**2,759**

The cost or purchase price of the shares in the trading portfolio approximates their fair value. As at 31 December 2018 the cost or purchase price of shares excluding trading portfolio is EUR 1,914 million lower (2017: EUR 2,134million lower) than the carrying amount.

7 Investments in group companies

Investments in group companies

	2018		2017	
	Interest held (%)	Statement of financial position value	Interest held (%)	Statement of financial position value
ING België N.V.	100	10,256	100	10,211
ING Holding Deutschland GMBH	100	8,200	100	8,086
ING Bank (Australia) Limited	100	2,757	100	2,675
ING Financial Holdings Corporation	100	2,484	100	2,101
ING Bank Slaski S.A.	75	2,316	75	2,084
ING Bank A.S.	100	1,305	100	1,476
ING Mauritius Investments I Limited	100	920	100	939
ING Real Estate B.V.	100	443	100	454
ING Australia Holdings Limited	100	726	100	1,014
ING Corporate Investments B.V.	100	588	100	546
Other (including financing companies)		2,819		2,739
		32,815		**32,325**

As at 31 December 2018, Investments in group companies includes credit institutions of EUR 17,809 million (2017: EUR 17,637 million).
As at 31 December 2018 listed investments in group companies amount to EUR 2,316 million (2017: EUR 2,084 million).

Changes in investments in group companies

	2018	2017
Opening balance	32,325	32,946
Effect of change in accounting policy	–511	
Repayment of capital injection	–178	–707
Revaluations	198	19
Results from group companies	3,025	2,825
Dividends received	–1,647	–1,986
Capital contribution	73	26
Exchange rate differences	–546	–788
Other changes	76	–10
Closing balance	**32,815**	**32,325**

8 Investments in associates and joint ventures

Investments in associates and joint ventures

	2018		2017	
	Interest held (%)	Statement of financial position value	Interest held (%)	Statement of financial position value
TMB Public Company Limited	25	832	25	737
Other		**100**		71
		932		**808**

Changes in investments in associates and joint ventures

	2018	2017
Opening balance	808	777
Effect of change in accounting policy	-23	
Balance as at 1 January 2018	785	
Additions	66	54
Share of results	98	42
Dividends received	-20	-22
Disposals	-45	-25
Revaluations	-2	1
Exchange rate differences	39	-24
Other changes	10	5
Closing balance	**932**	**808**

9 Intangible Assets

Changes in intangible assets

	Goodwill		Software		Other		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
Opening balance	422	509	431	384	2	2	855	895
Additions	202		279	188			481	188
Disposal				-8			-0	-8
Amortisation			-125	-108			-125	-108
Impairments			-1	-28			-1	-28
Exchange rate differences	-99	-87	0				-99	-87
Other changes			-14	3			-14	3
Closing balance	**525**	**422**	**570**	**431**	**2**	**2**	**1,097**	**855**

10 Equipment

Changes in equipment

	2018	2017
Opening balance	412	444
Additions	137	90
Depreciation	-114	-114
Disposals	-2	-11
Exchange rate differences		-2
Other changes	-2	5
Closing balance	**431**	**412**
Gross carrying amount as at 31 December	1,471	1,311
Accumulated depreciation as at 31 December	-1,040	-899
Net carrying value	**431**	**412**

11 Other assets

Other assets by type

	2018	2017
Derivatives	32,107	33,871
Deferred tax assets	365	387
Income tax receivables	72	138
Accrued interests and rents	28	3,784
Other accrued assets	342	838
Pension asset	510	520
Other receivables	5,256	4,311
	38,680	**43,849**

Derivatives includes transactions with group companies of EUR 13,100 million (2017: EUR 10,170 million).

Other receivables includes EUR 3,438 million (2017: EUR 2,343 million) related to transactions still to be settled at balance sheet date. As at 31 December 2018, an amount of EUR 239 million (2017: EUR 372 million) is expected to be settled after more than one year from the balance sheet date.

12 Deposits from banks

Deposits from banks

	2018	2017
Group companies	29,595	28,528
Third parties	30,705	30,605
	60,300	**59,133**

13 Customer deposits

Customer deposits by group companies and third parties

	2018	2017
Group companies	63,348	59,344
Third parties	251,665	247,168
	315,012	**306,512**

Customer deposits by type

	2018	2017
Savings accounts	120,873	121,533
Credit balances on customer accounts	100,196	93,248
Corporate deposits	61,022	70,440
Other	32,922	21,291
	315,012	**306,512**

14 Other liabilities

Other liabilities

	2018	2017
Derivatives	28,525	31,757
Trading liabilities	5,359	5,411
Accrued interest	19	3,989
Costs payable	1,231	1,669
Income tax payable	345	306
Other taxation and social security contribution	66	49
Other amounts payable	5,814	5,067
	41,361	**48,248**

Derivatives includes transactions with group companies of EUR 8,798 million (2017: EUR 7,931 million).

Other amounts payable includes EUR 3,285 million (2017: EUR 2,884 million) related to transactions still to be settled at balance sheet date. As at 31 December 2018, an amount of EUR 518 million (2017: EUR 649 million) is expected to be settled after more than one year from the balance sheet date.

15 General provisions

General provisions

	2018	2017
Deferred tax liabilities	241	389
Pension liabilities and other staff-related liabilities	12	9
Reorganisations and relocations	304	493
Other	240	356
	797	**1,247**

As at 31 December 2018, an amount of EUR 385 million (2017: EUR 297 million) is expected to be settled after more than one year from the balance sheet date.

16 Subordinated loans

Subordinated loans by group companies and third parties

	2018	2017
Group companies	10,358	8,177
Third parties	3,598	8,193
	13,957	**16,370**

Subordinated loans by type

	2018	2017
Capital debentures	4,734	9,228
Private loans	9,222	7,142
	13,957	**16,370**

The subordinated loans rank subordinated to the other liabilities in a winding-up of ING Bank.

17 Equity

Equity

	2018	2017
Share capital	525	525
Share premium	16,542	16,542
Revaluation reserves	2,187	2,898
Legal and statutory reserves	1,317	1,415
Other reserves	19,155	17,416
Unappropriated result	4,447	4,866
Total equity	**44,173**	**43,662**

Share capital

	Ordinary shares (par value EUR 1.13)			
	Number x 1,000		Amount	
	2018	2017	2018	2017
Authorised share capital	1,600,000	1,600,000	1,808	1,808
Unissued share capital	1,134,965	1,134,965	1,283	1,283
Issued share capital	**465,035**	**465,035**	**525**	**525**

No changes occurred in the issued share capital and share premium in 2018 and 2017.

Changes in revaluation reserves

2018	Property in own use reserve	Available-for-sale reserve	Equity securities at fair value through other comprehensive income	Debt instruments at fair value through other comprehensive income	Cash flow hedge reserve	Net defined benefit assets/- liability remeasurement reserve	Credit liability	Total
Opening balance	10	2,352			480	56		2,898
Effect of change in accounting policy		–2,352	2,117	49			–173	–358
Balance as at 1 January 2018	10		2,117	49	480	56	–173	2,539
Unrealised revaluations	4		–578	5			188	–381
Realised gains/losses transferred to the statement of profit or loss				–25				–25
Changes in cash flow hedge reserve					54			54
Change in net defined benefit assets/liability						1		1
Closing balance	**14**	**n/a**	**1,538**	**29**	**534**	**57**	**16**	**2,187**
2017								
Opening balance	7	2,849			845	105		3,806
Unrealised revaluations	3	–476						–473
Realised gains/losses transferred to the statement of profit or loss		–21						–21
Changes in cash flow hedge reserve					–365			–365
Change in net defined benefit assets/liability						–49		–49
Closing balance	**10**	**2,352**			**480**	**56**		**2,898**

Changes in legal and statutory reserves

2018	Share of associates and joint ventures reserves	Currency translation reserve	Statutory reserves	Capitalised software	Total
Opening balance	1,238	–1,645	1,478	344	1,415
Effect of change in accounting policy	–287				–287
Balance as at 1 January 2018	952	–1,645	1,478	344	1,128
Result for the year			160		160
Unrealised revaluations available-for-sale investments and other	–129				–129
Realised gains/losses transferred to the statement of profit or loss					
Changes in cash flow hedge reserve	288				288
Unrealised revaluation property in own use	–3				–3
Changes in net defined benefit asset/liability remeasurement reserve	5				5
Exchange rate differences and other	19	–405			–386
Changes in composition of the group and other changes	121			132	253
Closing balance	**1,252**	**–2,050**	**1,638**	**476**	**1,317**
2017					
Opening balance	1,098	–795	1,325	286	1,914
Result for the year			153		153
Unrealised revaluations available-for-sale investments and other	182				182
Realised gains/losses transferred to the statement of profit or loss	–69				–69
Changes in cash flow hedge reserve	–150				–150
Unrealised revaluation property in own use	–2				–2
Changes in net defined benefit asset/liability remeasurement reserve	19				19
Exchange rate differences and other	–41	–850			–891
Changes in composition of the group and other changes	201		–	58	259
Closing balance	**1,238**	**–1,645**	**1,478**	**344**	**1,415**

The Share of associates and joint ventures reserve includes the following components: Reserve for non-distributable retained earnings of associates of EUR 758 million (2017: EUR 652 million), Revaluation reserve of associates and joint ventures EUR 963 million (2017: EUR 1,079 million), Currency translation reserve of EUR –18 million (2017: EUR -37 million) and Net defined benefit asset/liability remeasurement reserve of EUR –451 million (2017: EUR –456 million).

The Statutory reserves include non-distributable reserves of EUR 1,638 million (2017: EUR 1,478 million) related to the former Stichting Regio Bank and the former Stichting Vakbondspaarbank SPN that cannot be freely distributed in accordance with the article 23.1 of the articles of association.

Changes in the value of hedging instruments that are designated as net investment hedges, are included in the line Exchange rate differences and other.

Changes in other reserves

2018	Retained earnings	Total
Opening balance	17,416	17,416
Effect of change in accounting policy	–393	–393
Balance as at 1 January 2018	17,023	17,023
Transfer from unappropriated result	4,866	4,866
Dividends	–2,517	–2,517
Employee stock options and share plans	59	59
Changes in the composition of the group and other changes	–277	–277
Closing balance	**19,155**	**19,155**

Changes in other reserves

2017	Retained earnings	Total
Opening balance	16,650	16,650
Transfer from unappropriated result	4,103	4,103
Dividends	–3,176	–3,176
Employee stock options and share plans	69	69
Changes in the composition of the group and other changes	–230	–230
Closing balance	**17,416**	**17,416**

The reserve for cash flow hedges is included in the Share of associates and joint ventures reserve on a net basis. The Revaluation reserve, Share of associates and joint ventures reserve and Currency translation 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 Revaluation reserve , Share of associates and joint ventures reserve and the Currency translation 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 associates and joint ventures 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 7,603 million (2017: EUR 7,603 million).

Reference is made to Note 20 ‘Equity’ and the Capital Management section in the consolidated annual accounts for additional information, including restrictions with respect to dividend and repayment of capital.

Notes to the Parent company statement of profit or loss

18 Net interest income

Net interest income

	2018	2017
Interest income on loans	10,039	9,384
Interest income on impaired loans	69	51
Negative interest on liabilities	380	418
Total interest income on loans	**10,488**	**9,853**
Interest income on available-for-sale securities	n/a	331
Interest income on financial assets at fair value through OCI	146	
Interest income on held-to-maturity securities	n/a	70
Interest income on financial assets at amortised cost	35	
Interest income on trading derivatives	n/a	13,837
Interest income on other trading portfolio	n/a	596
Interest income on securities at fair value through profit or loss	967	
Interest income on non-trading derivatives (no hedge accounting)	607	498
Interest income on non-trading derivatives (hedge accounting)	2,294	3,621
Other interest income	41	151
Interest income	**14,577**	**28,957**

	2018	2017
Interest expense on deposits from banks	186	152
Interest expense on customer deposits	1,824	1,813
Interest expense on debt securities	1,449	1,567
Interest expense on subordinated loans	700	753
Interest expense on trading derivatives	n/a	13,801
Interest expense on other trading liabilities	n/a	353
Interest expense on securities at fair value through profit or loss	784	
Interest expense on non-trading derivatives (no hedge accounting)	789	678
Interest expense on non-trading derivatives (hedge accounting)	2,102	3,221
Other interest expense	29	242
Negative interest on assets	351	19
Interest expense	**8,214**	**22,599**
Net interest income	**6,363**	**6,358**

19 Investment income and results from participating interests

Investment income and results from participating interests	2018	2017
Results from shares and other non-fixed income securities	125	89
Results from group companies	3,025	2,825
Results from associates, joint ventures and other participations	–27	44
	3,123	**2,958**

20 Net commission income

Fee and commission income	2018	2017
Funds transfer	789	753
Securities business	321	243
Insurance broking	38	30
Asset management fees	52	37
Brokerage and advisory fees	266	256
Other	483	472
	1,948	**1,791**

Fee and commission expenses	2018	2017
Funds transfer	279	261
Securities business	113	68
Asset management fees	4	5
Brokerage and advisory fees	35	36
Other	100	93
	532	**463**

21 Results from financial transactions

Results from financial transactions	2018	2017
Results from securities trading portfolio	–737	643
Results from currency trading portfolio	183	1,228
Results from non-trading derivatives	866	–1,392
Other	344	–165
	655	**314**

In 2018, Other includes EUR 341 million (2017: EUR -269 million) related to fair value changes on trading derivatives.

22 Other income

In 2017, Other income includes EUR 121 million related to a tax charge at ING Australia Holdings Ltd, for which a full reimbursement is expected to be received from NN Group. The remainder of Other income is made up of a number of small items, which are individually insignificant.

23 Staff expenses

Staff expenses	2018	2017
Staff expenses		
– Salaries	1,671	1,630
– Social security costs	226	204
Pension costs and other staff related benefit costs	289	275
Other management fees	843	728
	3,030	**2,837**

Remuneration of Senior management, Management board and Supervisory board

Reference is made to Note 48 'Related parties' (page 171 up to and including page 174) in the ING Bank Consolidated annual accounts.

24 Depreciation and amortisation

Depreciation and amortization

	2018	2017
Depreciation of equipment	114	114
Amortisation of software and other intangible assets	129	109
	244	**223**

25 Other expenses

Other expenses

	2018	2017
Computer costs	480	420
Office expenses	214	217
Travel and accommodation expenses	87	85
Advertising and public relations	193	215
External advisory fees	293	275
Regulatory costs	483	450
Addition/(releases) of provision for reorganisations and relocations	–42	–33
Other	948	351
	2,656	**1,980**

26 Taxation

Taxation by type

	2018	2017
Current taxation	878	689
Deferred taxation	–46	136
	832	**825**

27 Maturity of certain assets and liabilities

Analysis of certain assets and liabilities by maturity

2018	Less than 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity not applicable	Total
Assets							
Loans and advances to banks	17,534	5,255	7,357	14,946	8,644	18,818	72,553
Loans and advances to customers	34,752	10,948	22,987	85,938	161,846	28,201	344,672
Liabilities							
Deposits from banks	23,750	666	2,266	19,235	2,061	12,321	60,300
Customer deposits	229,952	19,539	15,974	16,739	14,951	17,856	315,012
Debt securities in issue	2,760	12,227	21,789	31,157	9,480	14,139	91,552
Subordinated loans	–	–	0	1,700	6,497	5,760	13,957

Analysis of certain assets and liabilities by maturity

2017	Less than 1 month	1–3 months	3–12 months	1–5 years	Over 5 years	Maturity not applicable	Total
Assets							
Loans and advances to banks	19,392	6,946	7,740	14,033	5,841	33,875	87,827
Loans and advances to customers	39,044	8,295	28,552	79,013	162,187	19,476	336,567
Liabilities							
Deposits from banks	20,662	2,523	1,696	18,705	1,999	13,548	59,133
Customer deposits	221,145	14,218	31,920	16,292	7,104	15,833	306,512
Debt securities in issue	3,182	12,877	14,466	33,700	10,481	9,374	84,080
Subordinated loans					11,376	4,994	16,370

28 Assets not freely disposable

Assets not freely disposable

	2018	2017
Equity and debt instruments	8,374	11,359
Lending	64,668	68,150
Banks	12,691	3,423
Other assets	536	548
	86,269	**83,480**

The table includes assets relating to securities lending as well as sale and repurchase transactions

29 Contingent liabilities and other commitments

Contingent liabilities by type

	2018	2017
Guarantees	52,495	28,233
Irrevocable letters of credit	7,961	7,688
Other	–	223
Contingent debts	**60,456**	**36,144**
Irrevocable facilities	51,245	45,137
	111,701	**81,281**

Contingent debts

	2018	2017
Group companies	36,260	15,855
Third parties	24,196	20,289
	60,456	**36,144**

Irrevocable facilities

	2018	2017
Group companies	3	86
Third parties	51,242	45,051
	51,245	**45,137**

30 Other

Guarantees

ING Bank has issued 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 (‘Einlagensicherundsfonds’ 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.

ING Bank N.V. has issued statements of liabilities in connection with Section 403 Book 2 of the Dutch Civil Code and issued third party guarantees (and third party letters of comfort/awareness) in a limited number of cases. Third party guarantees are used when ING Bank N.V. is requested to issue a guarantee to a third party creditor of one of its subsidiaries in order to guarantee the (financial) performance of this subsidiary.

Claim agreements

In the ordinary course of business we have entered into a number of agreements whereby we are provided and being provided indemnifications related to sale of our past businesses and agreements whereby we made detailed arrangements regarding allocation and handling of claims.

Fiscal unity

ING Bank N.V. forms a fiscal unity with ING Groep N.V. and several Dutch banking entities for corporation tax purposes. ING Bank N.V. and ING Groep 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.

31 Proposed appropriation of results

For 2018, it is proposed that the result, insofar at the disposal of the General Meeting, will be appropriated as follows. A total dividend payment of EUR 2,646 million, including interim dividend of EUR 2,473 million and a final dividend of EUR 173 million. The remainder of the result will be appropriated to the Other Reserves.

In May and September 2018 ING Bank N.V. paid EUR 868 million and in November 2018 ING Bank N.V. paid EUR 737 million interim dividend to ING Groep N.V.

Proposed appropriation of result

	2018
Net result	4,607
Addition to reserves pursuant to Article 24 of the Articles of Association	1,961
Proposed to be added to the Other Reserves pursuant to Article 24 of the Articles of Association	**2,646**

32 Subsequent events

There are no subsequent events to report.

Authorisation of Parent company annual accounts

Amsterdam, 4 March 2019

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
H.W. (Henk) Breukink
M. (Mariana) Gheorghe
M. (Margarete) Haase
R.W.P. (Robert) Reibestein

The Management Board Banking

R.A.J.G. (Ralph) Hamers, CEO and chairman of the Management Board Banking
T (Tanate). Phutrakul, CFO
S.J.A. (Steven) van Rijswijk, CRO
M. I. (Isabel) Fernandez Niemann, head of Wholesale Banking
R.M.M (Roel) Louwhaff, COO/CTO
A. (Aris) Bogdaneris, head of Challenders & Growth Markets
R.B (Ronald) Boekhout, head of Market Leaders

Independent auditor's report

To: the Shareholder and the Supervisory Board of ING Bank N.V.

Report on the audit of the financial statements 2018 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 Bank N.V. as at 31 December 2018 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 (EU-IFRS) 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 Bank N.V. as at 31 December 2018 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 2018 of ING Bank N.V. (the 'Company' or 'the Group' or 'ING Bank') 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 2018;

2 the following consolidated statements for 2018: 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 2018;

2 the parent company statement of profit or loss and statement of changes in equity for 2018; and

3 the notes comprising a summary of the significant 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 Bank N.V. in accordance with the EU Regulation on specific requirements regarding statutory audits of public-interest entities, the 'Wet toezicht accountantsorganisaties' (Wta, Audit firms supervision act), 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.

KPMG

Audit approach

Summary

Materiality
— Group materiality of EUR 300 million (2017: EUR 300 million).
— 4.4% of profit before taxation from continuing operations (2017: 4.1%).

Group audit
— 90% of total assets covered by audit procedures performed by component auditors (2017: 87%).
— 80% of profit before taxation from continuing operations covered by audit procedures performed by component auditors (2017: 86%).

Key audit matters
— Estimation uncertainty with respect to the impairment losses on loans and advances to customers and banks.
— Instances of non-compliance with anti-money laundering and anti-terrorism financing acts.
— Risk of inappropriate access or changes to information technology systems.

Opinion
Unqualified

Materiality

Based on our professional judgement, we determined the materiality for the financial statements as a whole at EUR 300 million (2017: EUR 300 million) which represents 4.4% (2017: 4.1%) 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 the financial statements and given the fact that ING Bank is a profit-oriented entity.

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 Bank is at the head of a group of components. The financial information of this group is included in the consolidated financial statements of ING Bank. ING Bank 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 group entities. Our group audit is mainly focused on significant group entities ('components'). These components are either individually financially significant due to their relative size compared to ING Bank or because we assigned a significant risk of material misstatement to one or more account balances of these entities. In addition, we included certain group entities 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 80% of profit before taxation from continuing operations and 90% of total assets. For the remaining 20% of profit before taxation from continuing operations and 10% of total assets, procedures were performed at the group level. The consolidation of ING Bank, the disclosures in the financial statements and certain accounting topics that are performed at ING Bank level are audited by the group audit team. Audit procedures that are performed by the group audit team include, but are not limited to, goodwill impairment testing, equity substantiation, 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 remote.

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 risks of material misstatement, and set out the information required to be reported to the group audit team. We visited component locations in the Netherlands, Belgium, Germany, Turkey, Spain, Romania, Poland and Switzerland, and we performed reviews of the audit files from local auditors. 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 90 million, based on the mix of size and financial statement risk profile of the components within ING Bank to reduce the aggregation risk to an acceptable level.

By performing the procedures mentioned above at ING Bank components, together with procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about ING Bank's financial information to provide an opinion about the consolidated financial statements.

The audit coverage as stated in the section summary can be further specified as follows:

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

80% Covered by audit procedures performed by component auditors

20% Covered by procedures performed at group level

Audit scope in relation to fraud and non-compliance with laws and regulations

General

In accordance with the Dutch Standards on Auditing, we are responsible for obtaining reasonable assurance that the consolidated and parent company financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. In determining the audit procedures, we will make use of the evaluation of Management in relation to fraud risk management respectively the risk of non-compliance with laws and regulation (prevention, detection and response), including ethical standards to create a culture of honesty. In these risk assessments, we made use of a forensic specialist. Our audit procedures differ from a specific forensic investigation, which often has a more in-depth character.

Fraud

In our process of identifying fraud risks, we assessed fraud risk factors, which we discussed with Management and the Audit Committee of the Supervisory Board. Fraud risk factors are events or conditions that indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Based on the auditing standards, we considered the following presumed fraud risk that was relevant to our audit:

— Fraud risk in relation to management override of controls (including the use of suspense accounts to perpetrate fraudulent financial reporting).

Furthermore, we identified and considered the following other fraud risk which could have a material impact on the financial statements:

— Fraud risk in relation to management override of expected credit loss provision results.

Our audit procedures to respond to fraud risks included an evaluation of the internal controls relevant to mitigate these risks and supplementary substantive audit procedures, including detailed testing of (administrative) journal entries and supporting documentation in relation to post-closing adjustments, including those related to expected credit loss provision results. Data analytics, including analyses for high-risk journals, are part of our audit approach to address fraud risks which could have a material impact on the financial statements. We also performed audit procedures to address the risk of management override of controls related to the expected credit loss provision results as described in the key audit matter 'Estimation uncertainty with respect to the impairment losses on loans and advances to customers and banks'. Furthermore, as part of our audit procedures to respond to fraud risks, we performed corroborative inquiry with the Group's Compliance, the Group's legal counsel and Corporate and Security Investigation department.

KPMG

Our procedures to respond to the above identified fraud risks did not result in findings relevant to our audit.

Laws and regulations

We assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general sector experience, through discussions with Management and inspection of selected documents regarding compliance with laws and regulations.

The potential effect of these laws and regulations on the financial statements varies considerably. Firstly, ING Bank is subject to laws and regulations that directly affect the financial statements including corporate tax law, financial reporting regulations and requirements under Title 9 BW2. We assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Secondly, ING Bank is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or litigation. We identified non-compliance with the anti-money laundering and anti-terrorism financing acts as those most likely to have such an effect.

As required by auditing standards, we performed audit procedures to identify non-compliance with these laws and regulations by inquiring of Management and those charged with governance, and inspecting correspondence with regulatory authorities. We also inspected lawyers' letters and remained alert to any indications of (suspected) non-compliance throughout the audit. Finally, we obtained written representations that all known instances of (suspected) non-compliance with laws and regulations have been disclosed to us. Our procedures and findings in relation to this area are reflected in the key audit matter 'Instances of non-compliance with the anti-money laundering and anti-terrorism financing acts' included in this report.

We are not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations.

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 2016 and 2017 key audit matter with respect to the provision for a legal matter has not been included in our 2018 auditor's report because the legal matter has been resolved during 2018 with the settlement agreed by ING Bank with the Dutch Public Prosecution Service. The inherent risks related to this settlement are included in the key audit matter 'Instances of non-compliance with the anti-money laundering and anti-terrorism financing acts'.

The 2017 key audit matter with respect to the first time adoption of the accounting standard IFRS 9 *Financial Instruments* is no longer included as this specifically related to the financial year 2017. The risks originating from applying IFRS 9 are included in the key audit matter 'Estimation uncertainty with respect to the impairment losses on loans and advances to customers and banks'.

Estimation uncertainty with respect to the impairment losses on loans and advances to customers and banks

Description

ING Bank's portfolio of loans and advances to customers and loans and advances to banks amounts to EUR 592 billion and EUR 30 billion, respectively, as at 31 December 2018 as disclosed in note 7 respectively note 3 to the financial statements. These loans and advances are measured at amortised cost, less a provision for loan losses (EUR 4.5 billion). Several aspects of the accounting for loan losses require significant judgement of Management, such as applying macroeconomic scenarios to the expected credit loss ('ECL'), significant increase in credit risk ('SICR'), complex ECL models and qualitative assessments regarding consideration for manual adjustments.

Our response

Our audit approach included testing both the design and operating effectiveness of internal controls and substantive audit procedures. As part of our procedures, we identified key IT applications used in the process and tested the relevant general IT and application controls over the key applications used.

Our procedures over internal controls focused on the governance over the process, controls around the completeness and accuracy of loan data used in the collective provisioning models, management review of outcome and management validation reviews, the determination of risk ratings and the process for calculating individual loan provisions.

Our audit procedures also focused on the process around the data flows through the information systems, application controls and calculations. Furthermore, we tested controls with respect to the implementation and validation of the credit risk models used to calculate the collective loan loss provisions. Also our audit focused on the analysis of the collective provision results and management reviews performed on impaired loans that have been individually assessed.

We assessed collective impairment methodologies, focusing our test work on the most significant portfolios from both size and credit risk perspective. KPMG modelling specialists have assisted in evaluating the key controls governing the modelling process and assessed the reasonableness of assumptions and inputs into the IFRS 9 impairment models, the effectiveness of internal controls over the authorisation and application of the SICR criteria, and the reasonableness of model outputs. With the assistance of our financial risk management specialists and information technology specialists, we have evaluated the calculations, data and information systems used by ING Bank for the collective provisions.

With the assistance of corporate finance specialists, real estate valuation specialists and accounting specialists, we have tested the methodologies, cash flows, and collateral values used in individual assessments of provisions for impaired loans, including management judgements made during the process such as various recovery scenarios and probabilities of those scenarios occurring.

KPMG economic specialists were engaged to assist in assessing the appropriateness of ING Bank's methodology in determining the economic scenarios used and the probability weightings applied to them. This involved evaluating ING Bank's review of the economics methodology for reasonableness. We have also assessed key variables used as well as the overall reasonableness of the economic forecasts as compared to external or alternative sources.

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.

Instances of non-compliance with the anti-money laundering and anti-terrorism financing acts

Description

As disclosed in note 44 to the financial statements, page 20 and 21 in the Management Board report and page 32 in the Supervisory Board report, ING Bank was subject of criminal investigations by Dutch authorities regarding various requirements related to client on-boarding, money laundering and corrupt practices. These investigations have been finalised and on 3 September 2018 a settlement was reached between ING Bank and the Dutch Public Prosecution Service totalling EUR 775 million. ING Bank performed their own analysis of the matter and continues to take measures to prevent non-compliance with anti-money laundering and anti-terrorism financing acts under the global ING Financial Economic Crime (FEC) enhancement program focussing on client file remediation, lookback exercises of past transactions and structural solutions for client activity monitoring.

The importance for ING to fulfil its role as gatekeeper in the financial sector, warrants a disclosure in their annual report providing insight into the status, scope and timeline of the FEC enhancement program, including a description of the set-up of the program, the actions to be taken from a local and global perspective and the expectations about finalisation of the program.

The financial services provided by ING Bank are inherently susceptible to the risk of money laundering. The implementation of the FEC enhancement program is fundamental to the efforts of ING Bank to comply with anti-money laundering and anti-terrorism financing acts.

Our response

Our responsibility in relation to this matter is to read the annual report and to consider whether there is a material inconsistency between the annual report and the financial statements. We need to consider whether there is a material inconsistency between the other information and the knowledge we obtained in the audit, and we also need to assess whether the matter is adequately accounted for and disclosed in the financial statements. We obtained an understanding of the nature of the instances of non-compliance and the circumstances in which they have occurred, including Management's own analysis. We have evaluated the implications of the instances of non-compliance in relation to other aspects of the audit and the impact on the financial statements. This evaluation, in which we involved forensic specialists, determined our audit approach as set out below.

As the investigations were concluded and the matter was settled in September 2018, we have read the settlement agreement and the statement of facts as published by the Dutch Public Prosecution Service. We have inspected the payment of the settlement and verified that it was accounted for and disclosed appropriately. We have considered the investigations and the steps taken by the Management Board and those charged with governance to respond to the instances of non-compliance with anti-money laundering and anti-terrorism financing acts. In this respect we have:

- inspected underlying documentation of internal investigations performed and other relevant documents;
- obtained and inspected external lawyers' letters and legal opinions;
- inquired external lawyers of the Group;
- attended Audit Committee meetings, Risk Committee meetings and Supervisory Board meetings where this topic was discussed;
- read minutes from relevant committees;
- inspected correspondence with regulators;
- inquired senior management, the Group legal counsel, the Group compliance officer and head of internal audit;
- evaluated the involvement of external specialists engaged by the Group;
- inspected the project plan regarding the FEC enhancement program that aims to remediate deficiencies in systems, processes and controls;
- inspected initial progress reports in relation to the FEC enhancement program;
- evaluated and discussed internal audit reports in relation to compliance;
- instructed local auditors of selected components of ING Bank to assess the progress of the remediation at component level;
- obtained specific management representations in relation to compliance with laws and regulations and the investigation;
- discussed with and reported our response and observations to the Management Board, the Audit Committee and Supervisory Board;
- communicated about the investigations with the regulators;
- assessed whether unusual transactions needed to be reported to the Financial Intelligence Unit.

Finally, we have assessed the disclosure of the settlement and the FEC enhancement program in the financial statements, in the Management Board report and the Supervisory Board report whether this provides a balanced view of actions, status, plans and expectations with respect to the FEC enhancement program.

Our observation

Based on our procedures performed we found the financial impact of the settlement has been timely, accurately and completely accounted for and disclosed in note 44 of the financial statements in accordance with IFRS-EU. Furthermore, in our professional judgement the reflection in page 20 and 21 in the report from the Management Board, and page 32 in the report from the Supervisory Board provides adequate disclosure to enable the users of this information to understand the assessment of the matter in the context of the financial statements and the actions initiated by the Management Board and Supervisory Board to enhance compliance with anti-money laundering and anti-terrorism financing legislation.

We observe that the required FEC enhancement program receives and will need ongoing attention from management, the Audit Committee and the Supervisory Board.

Risk of inappropriate access or changes to information technology systems

Description

ING Bank is dependent on its IT environment for the reliability and continuity of its operations and financial reporting. ING Bank 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.

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. Inappropriate access to an application or infrastructure could impact an automated control and therefore compromise reliability of financial data. 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 Bank'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, 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 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.

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 that consists of:

- the Report of the Management Board;
- the Corporate Governance Report; and
- 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 substantially less than the scope of those performed in our audit of the financial statements.

The Management Board is responsible for the preparation of the other information, including the report of the Management Board in accordance with Part 9 of Book 2 of the Dutch Civil Code and the other 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 the Shareholder as auditor of ING Bank 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 Bank 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 Management Board and the Supervisory Board for the financial statements

The Management Board is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, the Management Board 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 fraud or error.

As part of the preparation of the financial statements, the Management Board is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the Management Board should prepare the financial statements using the going concern basis of accounting unless the Management Board either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. The Management 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 located at the website of the Koninklijke Nederlandse Beroepsorganisatie van Accountants (NBA, Royal Netherlands Institute of Chartered Accountants) at: http://www.nba.nl/ENG_oob_01. This description forms part of our auditor's report.

Amstelveen, 4 March 2019

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

Articles of Association – Appropriation of results

Appropriation of results

The result is appropriated pursuant to Article 24 of the Articles of Association of ING Bank N.V., the relevant stipulations of which state that the result shall firstly be appropriated to the Stichting Regio Bank Reserve, respectively the Reserve Stichting Vakbondsspaarbank SPN or charged to that reserves in proportion to the ratio between the Stichting Regio Bank Reserve, respectively the Reserve Stichting Vakbondsspaarbank SPN and the company's equity at the end of the relevant financial year and that the remainder shall be at the disposal of the General Meeting.

Disclaimer

Certain of the statements contained herein are not historical facts, including, without limitation, certain statements made of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Actual results, performance or events may differ materially from those in such statements due to a number of factors, including, without limitation: (1) changes in general economic conditions, in particular economic conditions in ING's core markets, (2) changes in performance of financial markets, including developing markets, (3) potential consequences the United Kingdom leaving the European Union or a break-up of the euro, (4) changes in the fiscal position and the future economic performance of the US including potential consequences of a downgrade of the sovereign credit rating of the US government (5) potential consequences of a European sovereign debt crisis (6) changes in the availability of, and costs associated with, sources of liquidity such as interbank funding, (7) changes in conditions in the credit and capital markets generally, including changes in borrower and counterparty creditworthiness, (8) changes affecting interest rate levels, (9) inflation and deflation in our principal markets, (10) changes affecting currency exchange rates, (11) changes in

investor and customer behaviour, (12) changes in general competitive factors, (13) changes in or discontinuation of 'benchmark' indices (14) changes in laws and regulations and the interpretation and application thereof, (15) changes in compliance obligations including, but not limited to, those posed by the implementation of DAC6, (16) geopolitical risks, political instability and policies and actions of governmental and regulatory authorities, (17) changes in standards and interpretations under International Financial Reporting Standards (IFRS) and the application thereof, (18) conclusions with regard to purchase accounting assumptions and methodologies, and other changes in accounting assumptions and methodologies including changes in valuation of issued securities and credit market exposure, (19) changes in ownership that could affect the future availability to us of net operating loss, net capital and built-in loss carry forwards, (20) changes in credit ratings,

(21) the outcome of current and future legal and regulatory proceedings, (22) operational risks, such as system disruptions or failures, breaches of security, cyber-attacks, human error, changes in operational practices or inadequate controls including in respect of third parties with which we do business,

(23) risks and changes related to cybercrime including the effects of cyber-attacks and changes in legislation and regulation related to cybersecurity and data privacy, (24) the inability to protect our intellectual property and infringement claims by third parties, (25) the inability to retain key personnel, (26) business, operational, regulatory, reputation and other risks in connection with climate change,

(27) ING's ability to achieve its strategy, including projected operational synergies and cost-saving programmes and (28) the other risks and uncertainties detailed in the most recent annual report of ING Groep N.V. (including the Risk Factors contained therein) and ING's more recent disclosures, including press releases, which are available on www.ING.com. (29) this annual report contains inactive textual addresses to internet websites operated by us and third parties. Reference to such websites is made for information purposes only, and information found at such websites is not incorporated by reference into this annual report. ING does not make any representation or warranty with respect to the accuracy or completeness of, or take any responsibility for, any information found at any websites operated by third parties. ING specifically disclaims any liability with respect to any information found at websites operated by third parties. ING cannot guarantee that websites operated by third parties remain available following the filing of this annual report or that any information found at such websites will not change following the filing of this annual report. Many of those factors are beyond ING's control.

Any forward looking statements made by or on behalf of ING speak only as of the date they are made, and ING assumes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or for any other reason.

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