ANNUAL REPORT 2018

163rd Financial Year

SPUERKEESS

BANQUE ET CAISSE D'EPARGNE DE L'ETAT, LUXEMBOURG

Head office:
1, Place de Metz, Luxembourg

Company registration: Luxembourg B 30775

Self-governing public institution, established pursuant to the law of 21 February 1856 (Memorandum 1, no. 6 of 10 March 1856) and governed by the constitutional law of 24 March 1989 (Memorandum A, no. 16 of 28 March 1989)

2018 Audited Consolidated Financial Statements

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BANQUE ET CAISSE D'EPARGNE DE L'ETAT, LUXEMBOURG

STATEMENT ON THE COMPLIANCE OF THE CONSOLIDATED FINANCIAL STATEMENTS

31 December 2018

Luxembourg, 27 March 2019

Re: **Statement on the compliance of the consolidated financial statements and management report in accordance with the provisions of article 3 of the coordinated version of the Luxembourg transparency law ("Loi Transparence") of 11 January 2008**

We hereby declare that, to the best of our knowledge, the consolidated financial statements of the Banque et Caisse d'Epargne de l'Etat, Luxembourg as at 31 December 2018 have been prepared in accordance with the applicable accounting standards and give a true and fair view of the assets and liabilities as well as the financial position and results. We also hereby declare that the management report presents an accurate description of the development, results and situation of the Banque et Caisse d'Epargne de l'Etat, Luxembourg and of the group of companies included in the consolidated financial statements, taken as a whole, as well as the main risks and uncertainties facing the Bank and the BCEE Group.

For the Executive Committee

Guy ROSSELJONG
Deputy Chief Executive Officer

Françoise THOMA
Chief Executive Officer
President of the Executive Committee

BANQUE ET CAISSE D'EPARGNE DE L'ETAT, LUXEMBOURG

CONSOLIDATED MANAGEMENT REPORT
31 December 2018

SPUERKEESS GROUP CONSOLIDATED MANAGEMENT REPORT

The Spuerkeess Group comprises Spuerkeess, Luxembourg as the parent company and its fully consolidated subsidiaries and associates consolidated using the equity method.

SUSTAINED COMMERCIAL MOMENTUM IN “RETAIL, PROFESSIONAL, CORPORATE AND PUBLIC SECTOR BANKING” IN A PROLONGED ENVIRONMENT OF HISTORICALLY LOW INTEREST RATES

Retail and Professional

Throughout 2018, Spuerkeess continued its plan to renovate the branch network by creating a new modern branch located in the building of the insurance company La Luxembourgeoise S.A. in Leudelange and by relocating and redeveloping the new Bertrange/Concorde Branch.

Along with this upgrade, the Bank successively renovated the Mondorf-les-Bains, Limpertsberg, Sandweiler, Bascharage and Belvaux Branches to transform them into contemporary places to meet with customers. The new style of the branches is resolutely focused on a special welcome for the customer in a comfortable atmosphere. In each reception area, visitors will now find a coffee area, a Wi-Fi network as well as iPads and digital screens to inform them about the Bank’s products and services. New modern counters allow conversations to start immediately in the most pleasant and proactive way. Cash transactions are now handled by efficient ATMs located inside the branch, offering a range of new features including euro withdrawals in five different denominations, foreign currency withdrawals and payments on own account.

The full deployment of digital signage in the outside windows of all branches and the installation of Wi-Fi kiosks offer complete information to customers.

New automated teller machines (ATMs) were installed inside the new Cactus in Ettelbruck, in Martelange, in Kirchberg in the new Lighthouse building and at Esch-sur-Alzette CFL station.

Mobile ATMs were alternately present at 18 major sporting and socio-cultural events over 2018 and were a great success at the Schueberfouer and the Luxembourg City Christmas market.

In March 2018, the new Mobile Branch, currently serving the communities of Rambrouch, Wormeldange, Beaufort, Vianden and Troisvierges on a weekly basis, set out for the first time. This mobile infrastructure allows local customers to consult an on-site Bank agent who can answer their questions in a confidential chat room. An ATM installed inside the Mobile Branch allows customers to perform all their cash transactions.

In addition to modernising the structure of the branches and ATMs, there were several new developments in 2018. The launch of the new financial assistant “MIA” allows customers to set their own living expense budgets, placing their expenses in different categories of activity and planning the financing of their personal plans.

“Lease Plus” gives customers access to a car with full transparency of costs. By paying a fixed monthly instalment over a defined period, customers can use a car and all incidental services without having to worry about additional costs and unforeseen circumstances.

Lastly, the Bank has rounded out its product range with the complete digitisation of its personal loan product. Customers can use the S-net system to apply for financing. Thanks to automatic scoring, the loan amount can be released almost instantaneously to the applicant’s current account.

In lending, Spuerkeess remains the preferred partner of resident customers for housing loans, with a 7,6% increase in outstanding loans in 2018.

The conquest of a new international and residential customer base looking for a stable, effective banking partner as well as the loyalty of the existing customer base, have allowed Private Banking to continue its development in line with its business model.

The new European Markets in Financial Instruments Directive II (MiFID II), which has been in force since 3 January 2018, provides stronger protection for customers in their investments.

The Private Banking service has been modernised to provide tailored solutions for each type of investor. The ActivMandate service is intended for customers who want to delegate the management of their assets, while the new ActivInvest and ActivInvest+ advisory services allow customers to monitor and approve investment proposals.

SelfInvest is a dedicated service for investors looking to make their own decisions without an advisor and to manage the contents of their portfolios independently.

One of the solutions in this area is the introduction of a new investment support tool enabling advisors to better track and manage risks for customers in relation to centrally managed model portfolios. The result is optimal, consistent advice for customers, regardless of where the advice is given.

In asset allocation, Spuerkeess has also been able to offer attractive investment solutions to its customers through its new model portfolio approach and among a carefully selected universe of securities from the “lux | funds” range or other investment funds and Exchange-Traded Funds (ETFs).

Numerous training sessions for advisors have made their use of the new assistance tool easier and have prepared them to meet the new challenges in the financial markets.

Corporate and Public Sector

In its December 2018 economic analysis, STATEC revised Luxembourg’s economic growth downwards and now expects the country’s GDP to grow by 3% in 2019.

Despite the uncertain political and economic climate both in Europe and around the world (trade wars, Brexit, political tensions, falling stock prices, etc.), a study conducted in May 2018 among executives of Luxembourg companies by “Institut für Demoskopie Allensbach” on behalf of KPMG showed that they remained optimistic about the national economy over the next 12 months. This optimism prompted companies to invest, resulting in the strongest growth in outstanding corporate loans seen at Spuerkeess in the last 10 years.

Another positive factor influencing the growth of outstanding loans was the expiry at the end of December 2018 of the fiscal measure aiming to tax capital gains on real estate at a quarter of the overall rate.

However, this increase in outstanding loans did not result from a favourable economic and fiscal environment alone.

According to a 2018 study by ILReS, Spuerkeess has become Luxembourg’s top bank for SMEs, thanks to the ongoing proactive commercial efforts in recent years.

In the highly competitive area of financing for public and similar institutions, Spuerkeess continues to defend its leading position and remains the preferred partner of players in the public sector.

Over the course of the 2018 financial year, Spuerkeess also announced its participation in “InnovFin”, dedicating EUR 40 million to the programme. “InnovFin” is a joint initiative of the European Investment Bank (EIB), the European Investment Fund (EIF) and the European Commission to promote research and innovation in Europe.

FINANCIAL MARKETS AND INVESTMENT FUNDS REVENUES

Financial markets

Treasury activity volume remained steady in 2018. Customer deposits continued to grow, and the Bank has kept the volume of its international refinancing programmes at a limited level in order to reduce its excess liquid funds.

In reinvestments, a significant share of the funds was directed to government securities and other securities eligible for refinancing with the ECB, especially a low-risk, high-liquidity bond portfolio of EUR 3 billion. Credit institution loans and receivables decreased by 21,4% compared with 1 January 2018 to EUR 2,58 billion at 31 December 2018, while customer loans and receivables increased by 4,9% compared with 1 January 2018 to EUR 21,80 billion at 31 December 2018.

In order to improve the performance of cash transactions and reduce their credit risk, Spuerkeess continued to make extensive use of derivatives for hedging purposes. At the end of 2018, outstanding foreign exchange swaps and forward transactions amounted to more than EUR 12,2 billion. At the same date, outstanding interest rate swaps (IRS) and cross currency interest rate swaps (CIRS) totalled EUR 13,0 billion. Loans totalling EUR 0,6 billion were guaranteed by eurozone public debt securities as part of repurchase agreements.

The reorientation of monetary policies around the world was confirmed in 2018. As expected by the market, the US Federal Reserve Bank ("Fed") raised the Fed Funds rate range to 2,25% – 2,5% on 19 December, thus tightening its monetary policy for the fourth time in 2018. The tightening was 100 bips over 2018, facilitated by the continued strong expansion of the US economy.

In 2019, Fed economists expect growth of 2,3% and price increases of 1,9%. Nevertheless, with the late-2018 flight-to-quality movement, triggered by fears of a global economic slowdown, market participants anticipate that the Fed will slow its monetary tightening policy in 2019.

Unsurprisingly, the ECB left its key interest rates unchanged in 2018. The refinancing rate remained at 0%, and deposit facilities rate stayed at -0,4%. Europe continues to lag behind the United States in its monetary cycle. Although the economic situation improved significantly in 2018, the prospect of normalisation of the European Central Bank's (ECB) monetary policy remains uncertain.

The currency market was affected by the rise of the dollar, which appreciated significantly against all major currencies except the yen. The euro fell to a low point of 1,12 against the dollar in 2018 and ended the year at 1,14. It was negatively affected by uncertainties related to the political situation in Italy, continued weakness in expected inflation and the Fed's rate hikes. The pound sterling again had a very volatile year due to uncertainties about Brexit.

Credit spreads widened substantially in 2018 in response to the numerous uncertainties about political stability in developed countries.

Brexit, budgetary troubles in Italy, a social movement in France, as well as an increased, pervasive risk of a US-China trade war increased volatility in financial markets.

In addition, the ECB stopped adding to its bond portfolio.

In sum, the above phenomena caused a reassessment of the risk in the markets, leading to a sharp rise in credit spreads. In more concrete terms, the iTraxx Index, which measures the credit risk of European issuers in the Investment Grade universe, more than doubled in 2018, increasing from 44 bips in January to 92 bips at the end of 2018. Risk premiums were therefore close to the level seen on the day after the Brexit vote.

Institutional Clients

The "Institutional Clients" department (DCI) serves banks, insurance companies, financial sector professionals, investment funds, family offices, state entities, as well as supranational entities. The correspondent banking activity and the management of the network of cash correspondents and sub-custodians are also integrated into the DCI.

As of 31 December 2018, the department had total holdings of EUR 54,4 billion. With regard to assets, safekeeping of

securities represented EUR 36,0 billion, and the liquid funds component totalled EUR 13,4 billion.

Volumes generally declined over 2018 due in particular to stock market corrections. Customer deposits fell by around 4%, while liquid funds also declined due to changes in the behaviour of supranational and state customers. Assets decreased among the various types of customers.

Spuerkeess started serving securitisation vehicles during the 2018 financial and thus expanded the types of customers covered.

As of 31 December 2018, there were six open-end investment funds (SICAV) in the in-house range, composed of 27 sub-funds, representing EUR 3,1 billion in total assets.

RISK MANAGEMENT POLICY

To ensure effective management of risk at all levels, Spuerkeess has implemented governance based on the concept of the three lines of defence.

The Bank has an independent Risk Management function, which reports directly to the Executive Committee, as does the Compliance function. These two functions provide the second line of defence in the Spuerkeess governance model, while the "Internal Audit" function represents the third line of defence and, as such, has a dual reporting line to the Executive Committee and the Board of Directors.

The Bank has opted for a "defensive" risk profile defined in the "Risk Appetite Framework" (RAF). The RAF includes indicators of the Bank's major risk categories and enables the Executive Committee and the Board of Directors to regularly monitor the overall risk situation of Spuerkeess in detail. Risk appetite is defined as the level of risk that Spuerkeess is willing and able to bear to ensure the pursuit of its strategic objectives. The levels of risk to which Spuerkeess is exposed are measured through a set of strategic indicators, operational metrics, and macroeconomic indicators. Risk appetite is expressed through the surveillance levels set by Spuerkeess for these indicators.

Risk appetite is transposed into a set of limits intended to manage and control the Bank's various risks. These limits are indicated in the Bank's Limit Handbook.

Risk management is described in detail in note 6 to the consolidated financial statements as at 31 December 2018. This chapter is subdivided into several major risk categories.

Credit risk

Credit risk is the risk of financial loss on the Bank's receivables due to a deterioration in the credit quality of debtors, which could even result in the default of a borrower or the inability to recover assets deposited with third parties. Credit risk concerns both actual and potential receivables.

Each Bank commitment giving rise to a credit risk is subject to prior analysis of the borrower's credit quality by the "Loans and Credit" department. The borrower's credit quality is thus assigned a rating. The Bank's internal ratings are a direct component of the credit risk management system insofar as they are one of the key parameters used to set limits.

Decisions on loans to the domestic economy are made by the various credit committees, organised hierarchically according to the customer's overall credit outstanding. Residential mortgage loans account for more than half of the portfolio. Credit risk is assessed on the basis of customers' general creditworthiness and through the process of assessing their ability to repay loans or the existence of collateral.

A majority of counterparties in the international portfolio are banks and financial institutions. Internal ratings are applied to banking counterparties using a combination of quantitative and qualitative analyses. The quantitative component is based on financial ratios that best describe the counterparty's profitability, capital strength, liquidity and the quality of its assets, while the qualitative component is based on the analyst's own assessment of non-financial factors such as market share and governance. An initial investment is made only with counterparties classified as investment grade.

For international commitments to non-financial entities, priority is also given to counterparties classified as investment grade in OECD countries, mainly in Europe and North America. Like all the Bank's counterparties, these are assigned an internal rating based on rules similar to those applied to banks and financial institutions.

Outstanding amounts are subject to counterparty and sector risk monitoring and to regular checks based on updated financial analyses and proposed adjustments to limits per counterparty. The Bank also applies a country limit system for all foreign countries in which it is active. These limits are periodically reviewed.

The European Market Infrastructure Regulation (EMIR) aims to reduce bilateral counterparty risk by requiring the use of Central Counterparty Clearing (CCP) for derivative financial instrument transactions. To comply with this obligation, the Bank has opted to work not through direct access to a central counterparty but rather through direct members, known as clearing brokers.

Market risk

Market risk is the risk of loss arising from unfavourable changes in various financial parameters, the main ones being interest rates, share prices and foreign exchange rates.

The Bank's market risk management policy distinguishes between mismatch risk, which arises from structural mismatches between the maturities of resources and the use made of those resources in the Bank's balance sheet, and the risk associated with cash management and trading activities.

Mismatch risk is handled by the Asset Liability Management (ALM) Committee, composed of members of the Executive Committee, several commercial department heads, and the heads of the Loans and Credit, Risk Management, and Accounting departments. The ALM Committee is responsible for establishing the broad guidelines for interest rate risk management beyond two years and for setting the target ALM profitability. The ALM Committee is assisted by an ALM Subcommittee, which meets monthly.

Interest Rate Risk in the Banking Book (IRRBB)

In 2016, the Bank launched a comprehensive project to improve its ability to analyse and manage interest rate risk ("Interest Rate Risk in the Banking Book"). After the tool selection phase in 2016, 2017 was devoted to implementation of the new system. In the first half of 2018, the tool was used for the first time for the production of interest rate risk indicators. Certain calculations have since been added, and final testing is expected to be completed by the end of the first half of 2019.

Liquidity risk

Liquidity risk results from a potential mismatch between financial inflows and outflows on a specific date. The risk for a credit institution is that it may be unable to meet its payment obligations at a given point in time as a result of having insufficient liquid assets relative to its maturing liabilities. By virtue of its financial structure, the Bank is generally in a position of excess liquidity.

The Bank constantly monitors liquidity risk on the basis of maturities, including both very detailed reconciliation of cash inflows and outflows over a six-month horizon and a medium- and long-term assessment of structural funding requirements monitored by the ALM Committee.

In accordance with the Capital Requirements Regulation (CRR) and with the Commission Delegated Regulation of 10 October 2014, Spuerkeess has, since 2015, published its liquidity coverage ratio (LCR), intended to ensure sufficient 30-day liquidity. At 31 December 2018, the LCR was 124%, well above the minimum threshold of 100% since 2018. Moreover, Spuerkeess is aiming to maintain an LCR level far above the regulatory minimum. The Net Stable Funding Ratio (NSFR), intended to ensure sufficient one-year liquidity, entered into force on 1 January 2018.

Leverage ratio

The leverage ratio measures the proportion of core capital to the Bank's exposures without taking collateral into account and adding off-balance-sheet commitments. In exact terms, this is the ratio of "CET 1 capital / Balance sheet sum and weighted off-balance-sheet commitments". This ratio is not based on the risk represented by the various exposures but is an additional tool intended to limit the use of excessive leverage in the banking sector. The Spuerkeess leverage ratio stood at 7,9% as at 31 December 2018, well above the regulatory minimum of 3,0%.

Operational risk

The roles and responsibilities of the control functions as well as the first line of defence are clearly highlighted in the Operational Risk Management Policy. Operational risk management is supervised by various committees, including the Risk Management Committee at the Executive Committee level and the Risk Committee at the Board of Directors level. The guidelines as well as the ultimate supervision and definition of operational risk appetite come directly from the Board of Directors, and implementation is ensured by the Executive Committee.

The Bank aims to reduce operational risk by continuously improving its operating systems and organisational structures.

Financial risk and hedge accounting

The consolidated financial statements of Spuerkeess Group have been prepared in accordance with IFRS as adopted by the European Union and comprise the financial statements of the Bank, subsidiaries, and entities over which the Group has control when it has rights to variable returns, because of its relationships with those entities, and the ability to affect those returns through its power over those entities.

Subsidiaries are consolidated from their date of acquisition, when the Bank, as the parent company, has the power to direct their financial policies. They are deconsolidated on the date such control ceases.

The Bank uses derivative financial instruments to hedge against interest-rate, foreign-exchange, and fixed-price risks (stock market indices and share prices). The derivative financial instruments commonly used are IRS and CIRS in standard plain vanilla hedging transactions. In addition to these standardised contracts, the Bank uses swaps with structured components to specifically hedge structured issues and acquisitions of bonds containing embedded derivatives, provided they are closely related.

Derivative financial instruments are considered as being held for trading except where they are designated as hedging instruments. When entering into a contract, the Bank may designate certain financial instruments as hedging instruments, if the transactions meet the criteria set out in IAS 39. The Bank primarily uses fair value hedges and, secondarily, cash flow hedges. Beyond these contract-by-contract hedges, the Bank applies fair value macro-hedging on fixed-rate loans in accordance with the principles of IAS 39 in its “carve-out” version for the European Union. This hedging is done exclusively using IRS financial instruments. In accordance with IFRS 9, the Bank continues to apply hedging principles according to IAS 39.

Management and monitoring of risks inherent in compiling financial reporting

The Bank has developed procedures and control systems to compile and monitor financial information. To provide an assurance of the quality and completeness of financial information, the Bank conducts daily checks on internal account movements, monitors the main headings of the income statement, including interest margin, fees and general and administrative expenses, and verifies the completeness of the information gathered through different IT applications before being fed into the accounting information system. The Bank reconciles the balances of pending accounts, interest accrual accounts and other internal accounts on a monthly basis.

The Bank also draws up a daily trial balance so that each of its entities, including the trading room, can monitor the impact of their operations.

The accounting and risk management departments work in close cooperation to evaluate portfolio positions or to calculate valuation allowances for assets showing evidence of impairment. Since the introduction of IFRS 9, the impairment model for financial assets has been based on the recognition of expected losses. This led to an increase in the provisioning requirement at the time of the transition to IFRS 9, which has been taken into account in own funds.

Besides purely accounting controls, the Bank regularly monitors its profitability by customer, product and business line and conducts a monthly analysis of the spending budget. The Executive Committee uses a Management Information System (MIS) to monitor the performance of the Bank’s business lines. Similarly, it analyses and validates the Bank’s financial position and monitoring of the spending budget on a monthly basis.

IFRS 9 “Financial Instruments”

IFRS 9 “Financial Instruments” replaced IAS 39 on 1 January 2018. The Bank has adopted the part on classification and valuation of financial instruments and the part on value adjustments on financial instruments. However, the Bank has taken the option provided by the standard to continue applying IAS 39 for hedge accounting pending a final standard on macro-hedging.

More detailed information on the methodology and the quantified impacts of the first-time application of IFRS 9 is presented in chapter 2.1 of the annual report.

IFRS 16 “Leases”

IFRS 16 “Leases” replaced the current IAS 17 of the same name as from 1 January 2019. IFRS 16 mainly introduces a single accounting treatment for leasing. While the new standard continues to distinguish between operational and financial leases for lessors and does not introduce any accounting changes for lessors, it removes this distinction for leases where the entity is a lessee.

Under IFRS 16, all leasing operations will require recognition of a “right to use an asset” and a “rental obligation” on the asset side and the liability side of the balance sheet respectively.

The Bank has identified all leases that require capitalisation under IFRS 16. These primarily consist of leases on buildings, parking spaces and locations for automatic teller machines.

Brexit

In a referendum held on 23 June 2016 in the United Kingdom, a majority voted in favour of the country’s exit, and the process of leaving the European Union officially started on 29 March 2017 when the British government triggered Article 50 of the Lisbon Treaty.

Spuerkeess is monitoring “Brexit” developments closely and is preparing for the various scenarios, including a “Hard Brexit”. In particular, the Bank has examined the implications and consequences of the UK’s withdrawal for it and has found that the implications are limited. The Bank has taken all available measures to ensure the continuity of its activities and its services for customers.

Compliance with the CRR

Spuerkeess meets market requirements through compliance with Regulation (EU) 575/2013, one of the objectives of which is to disclose to the market the Bank’s exposure to the above risk categories.

Information on the composition of capital, the risk management strategy and the remuneration policy may be found in the Bank’s Pillar 3 publication. This information supplements the information published in these annual financial statements.

The Pillar 3 report for the 2018 financial year is available on the Bank’s website.

OTHER ACTIVITIES

Other activities include back office and support activities, which play an essential role in supporting the Bank’s strategic and development goals. Back office activities make it possible to process the growing volumes of payment, credit and securities transactions from the commercial units and ensure control and security in processing these transactions in accordance with the laws in force. Spuerkeess is continuing its efforts to improve productivity in order to adapt to changing markets.

Support activities cover a wide variety of areas, such as Bank finances, legal and regulatory matters, organisation, marketing, logistics and IT.

The “Risk Management” (RIM) function includes market risk measurement, the credit risk control unit function (CRCU, as defined by Basel III Pillar I) and the monitoring and reporting of operational incidents within the Bank. In addition to the activities mentioned above, the RIM function is responsible for the initial and recurrent validation of all internal models, but without any involvement in the day-to-day management of credit files, thus ensuring independence from the business units.

At a time when good governance is gaining in importance, the Compliance function manages its compliance and sanctions risks under the increasingly complex rules around anti-money laundering, counter-terrorist financing and tax compliance.

Regulatory activities

The Bank remained very active on the regulatory front because of the large number of ongoing projects and the work associated with the Single Supervisory Mechanism (SSM) whose aim is to ensure the safety and soundness of the European banking system and to increase financial stability in Europe. The SSM is one of the three pillars of the banking union, along with the Single Resolution Mechanism (SRM) and the Deposit Guarantee Scheme (DGS).

The SRM's goal is to minimise the cost to taxpayers and the real economy of resolving banks that are part of the banking union which could face serious challenges. This mechanism has been fully operational since 1 January 2016 and was transposed into Luxembourg law by the law of 18 December 2015. The Bank updates a preventive recovery plan each year with planned measures in the event of a significant deterioration of the financial situation. It also participates in regular working sessions with representatives of the SRM, which is responsible for defining the Spuerkeess critical activities and developing a preferred resolution strategy as part of a specific resolution plan to be developed for the Bank.

The DGS, also introduced in Luxembourg with the law of 18 December 2015, requires that each EU Member State establish a deposit guarantee scheme that protects customers' bank deposits up to EUR 100.000 per bank. In Luxembourg, this responsibility has been given to the *Fonds de garantie des dépôts luxembourgeois* (FGDL, Luxembourg deposit guarantee fund), which replaced the non-profit organisation *Association pour la garantie des dépôts Luxembourg* (AGDL, Luxembourg deposit guarantee association) starting in financial year 2016.

With regard to taxes, the OECD developed the Common Reporting Standard (CRS) for the automatic exchange of information relating to financial accounts between states that have adopted the standard. The European Union adopted the CRS via a European directive, transposed into Luxembourg law by the law of 18 December 2015 on the Common Reporting Standard (CRS). Under this law, Spuerkeess cooperates fully with foreign jurisdictions on the financial accounts of non-resident customers.

The Bank provided data on customers identified as "US Person" as a result of the Intergovernmental Foreign Account Tax Compliance Act (FATCA) signed between Luxembourg and the United States on 28 March 2014, which includes the automatic exchange of information between the Luxembourg and US tax authorities on accounts held by US citizens and persons residing in the United States. Under this law, Spuerkeess cooperates closely with the Grand Duchy's direct contributions administration.

Throughout 2018, the Bank continued to incorporate the new "MiFID II" rules of conduct, which came into force on 3 January 2018, into its internal investment service processes. Various reports to enhance investor protection and increase customer transparency were also put in place.

In accordance with BCBS 239, which consists of 14 principles recommended by the Basel Committee on Banking Supervision (BCBS) for the management, aggregation, and governance of risk-related data, Spuerkeess has defined a Data Policy and has put in place a Data Governance system, including dedicated functions and tools. The goal of this system is to strengthen the quality, reliability, traceability, and availability of the Bank's data in order to ensure robust management and centralised monitoring. It prioritises data relating to risk management and reporting and will be gradually extended to all data.

Repealing Directive 95/46/EC of 24 October 1995, General Data Protection Regulation (EU) 2016/679 (GDPR) entered into force on 25 May 2018. In 2017, Spuerkeess launched an initiative to come into compliance with this regulation, which, among other things, led to the appointment of a Data Protection Officer and the creation of a dedicated division, the Data Protection Office.

2018 was mainly devoted to drafting procedures and policies, adjusting many contracts with subcontractors, as well as putting in place essential tools such as a register of data processing operations as well as mapping of data.

Given that most banking products and services are concerned, adjustments were made to the General Terms and Conditions in order to inform all customers properly. In addition, a coherent, comprehensive Data Protection Policy was drafted and made available on www.bcee.lu. This policy provides further details on the various personal data processing operations

carried out by Spuerkeess, the rights of data subjects and how these rights are exercised. The cookie policy was also revised and adapted in 2018.

Computer tools facilitating the exercise of rights, as well as the procedures governing them, were developed and drafted: a database for tracking requests to exercise these rights, a tool for entering and managing customer opt-outs and consents collected, a register of processing operations, etc. The operation of certain applications was also adapted to become "GDPR-compliant". Certain data are thus no longer systematically displayed or even collected. Some processes (data transfers) were also adapted or eliminated. Certain access rights were reviewed and modified to be in line with the principles of data minimization and privacy by default. Lastly, privacy by design, another fundamental principle of the GDPR, is now taken into account in any new project or product.

Changes within the management of the Group's parent company

On 3 May 2018, Doris Engel joined the Executive Committee, filling the vacancy left by Michel Birel's retirement.

Since then, Guy Rosseljong has held the position of Deputy Chief Executive Officer.

Shareholdings

Fulfilling one of its statutory tasks, which involves contributing to the country's economic and social development in all areas through its financing activities, in addition to promoting savings, Spuerkeess continues to hold equity interests directly or indirectly, in key sectors of Luxembourg's economy. It also supports the start-up and development of businesses with a national interest.

The Bank holds 22,7% of the capital of Société de la Bourse de Luxembourg S.A., of which it is also a founding member and the largest shareholder.

In 2018 and in collaboration with three other players in the Luxembourg financial centre, Spuerkeess participated in the creation of LuxHub S.A., in which it holds 32,50% of the capital. The aim of this company is to develop a common platform for connectivity between credit institutions and the new financial players resulting from the European PSD2 and thus supports the entire financial industry in the transition to open banking.

Since 1989, Spuerkeess is a 40,0% shareholder of the Lalux group. The Lalux group and Spuerkeess, indirectly, are shareholders of PECOMA Actuarial and Risk S.A., which is active in the development and implementation of supplementary pension schemes and which offers actuarial, administrative and accounting management services for pension schemes.

Media and telecommunications are important sectors for Luxembourg's economy. The Bank is a founding shareholder of SES S.A., the world leader in global satellite communications. The Bank holds a 10,9% stake with the associated voting rights.

In the air transport sector, Spuerkeess holds equity interests in Luxair, Société Luxembourgeoise de Navigation Aérienne S.A. (21,8%), which is active in air navigation, tour operation, cargo handling and catering, and in Cargolux Airlines International S.A. (10,9%), which is one of the world's largest all-cargo airlines.

Through its 10,98% stake in Paul Wurth S.A., the Bank continues to support design and industrial engineering businesses.

Through its 11,0% stake in the capital of Société Nationale des Habitations à Bon Marché S.A. (S.N.H.B.M.), which specialises in the design and construction of single-family homes and apartment buildings at affordable prices and under long-term leases, Spuerkeess is fulfilling its social mission of facilitating home ownership for personal needs.

Since 2016, the Bank holds a 12,0% stake in the capital of Encevo S.A., the holding company for Luxembourg's market-leading energy group. The acquisition of this stake is consistent with the past equity investments of Spuerkeess in other Luxembourg economic players.

In addition to these major shareholdings, Spuerkeess has interests in other companies active in the development of economic life.

Human resources

Spuerkeess continues to promote its attractiveness as a socially responsible employer. The career prospects offered by the bank are based on values such as continued professional development, internal mobility, job stability, a collegial and dynamic working environment and work-life balance.

With this in mind, 2018 marked the Bank's introduction of a more favourable part-time option, allowing its staff members to aim for better organisation of their private life with their work. Along the same lines, the introduction of a time savings account (CET) during the year has made working hours more flexible.

The Bank offers a wide range of career opportunities. Its systematic, proactive use of internal mobility provides optimal guidance for the professional development of the Bank's staff. The current economic environment, constantly being transformed and supported by increasing digitalisation of processes, is creating new types of jobs every day while making other types disappear. The bank is fully aware of this reality and has been participating since 2018 in the pilot "Luxembourg Digital Skills Bridge" project promoted by the Ministry of Labour, Employment and the Social and Solidarity Economy with the primary aim of supporting and developing employees who are in positions directly affected by the digital transformation of the economy.

In 2018, Spuerkeess hired 92 new employees, including 34 female agents and 58 male agents.

Corporate governance

While Spuerkeess has always been committed to a corporate culture based on good governance rules, the principles of governance have become the major pillars governing the organisation and activities of financial institutions and have continued to evolve since Circular CSSF 12/552. For systemically important banks such as Spuerkeess, the European regulator is increasingly stressing the importance of good governance.

Corporate social responsibility (CSR)

In 2019, in addition to its traditional annual report, the Bank will publish, for the second time, a non-financial report for the 2018 financial year in accordance with the "GRI Standard" detailing the Bank's strategy and activities in the area of Corporate Social Responsibility (CSR).

Cultural, sponsorship and patronage activities

Spuerkeess supports actions promoting culture, sports, the environment, and social welfare. Together with its partners, the Bank makes a sustained commitment to actions and events in keeping with its ethical standards and the values of proximity and professionalism.

Numerous events and conferences on a variety of topical issues for individuals, businesses, and institutional clients have been organised within the prestigious setting of the "19 Liberté" and Rousegäertchen banking centres.

As it does every year, the Bank supported a large number of socio-cultural events, both in music and sport, and numerous Luxembourg student associations throughout the country.

Spuerkeess continues to demonstrate its cultural commitment through its "Am Tunnel" contemporary art gallery. In 2018, the gallery hosted the exhibits "Nature's Luxembourg" by photographer Raymond Clement, "Young Art Under Ground" by students of Luxembourg high schools and "Rock History" by artist and painter André Depienne. In addition, the second edition of the "De Mains De Maîtres" exhibit, presented at the "19 Liberté" Banking Centre, was once again a great success among both national and international art enthusiasts.

As happens every year, the Bank Museum, which traces the history of Luxembourg's financial centre and of Spuerkeess since 1856, continued in 2018 to spark great interest, particularly among student groups.

More than ever, these sites are now two of the capital's leading attractions, both for Luxembourg's population and for its many foreign visitors.

DYNAMIC COMMERCIAL ACTIVITY IN A PROLONGED ENVIRONMENT OF HISTORICALLY LOW INTEREST RATES

At EUR 510,7 million as of 31 December 2018, the bank margin was down EUR 75,2 million (-12,8%) compared with the 2017 financial year.

The decline in bank margin primarily stemmed from two phenomena. The first was the introduction of IFRS 9 on 1 January 2018, which has resulted in methodological bias in comparing the results of financial years 2017 and 2018. On the one hand, in 2017, sales of securities not recognised at fair value in the income statement were included in the 2017 income statement for EUR 18,4 million, whereas in 2018, they were included directly in a dedicated equity item in the balance sheet for EUR 0,9 million. On the other hand, the provisions of IFRS 9 have led the Bank to measure a wider range of financial instruments at fair value through profit or loss from the 2018 financial year onwards, which explains much of the decrease in income from financial instruments from EUR 50,1 million at the end of 2017 to EUR 5,4 million at 31 December 2018.

The second phenomenon concerns the decrease in income from securities from EUR 47,4 million in 2017 to EUR 31,4 million over the 2018 financial year, a decrease of EUR 16,0 million or 33,8% from the previous year, mainly due to the decrease in the dividend of a significant strategic stake held by the Bank.

Net interest margin fell 1,9% due to the continued low, if not negative, limiting especially investment and maturity switching opportunities for retail banks despite higher business volumes.

Income from fees grew 3,2% due to an increase in asset management fees, while fees from loans and payments increased by 4,6%. However, insurance premiums collected decreased by 36,9%.

Fair-value measurements of variable-income securities are recognised in equity under the heading “revaluation reserve”. The increase in valuations of securities during the year had an influence on the revaluation reserve, which amounted to EUR 539,7 million at the end of 2018, up EUR 172,7 million or 47,0% compared with the restated figures at 1 January 2018.

Other operating income and expenses fell from EUR -16,4 million at year-end 2017 to EUR -28,5 million at year-end 2018 due to a refund of excess VAT related to several years during 2017.

Despite a rigorous cost control policy, total general expenses increased 4,3%. This was mainly due to the increase in payroll expenses related to the transposition of the civil service wage agreement with, among other things, the introduction of a time savings account, as well as the increase in allowances for impairment of tangible and intangible non-current assets following significant IT investments related to the implementation of new regulations.

Resolutions of certain loans in default, for which an allowance for impairment was recognised as well as certain adjustments made in relation to the first-time application of IFRS 9 allowed the Bank to record large write-backs of net allowances for impairment of individual credit risks totalling EUR 20,2 million in 2018. The total amount of reversals of provisions for risks and charges was EUR 2,0 million in 2018, with a positive impact on the annual comparison.

In view of the above, the Bank posted a net profit of EUR 158,9 million for the 2018 financial year, down EUR 97,7 million (38,1%) from a net profit of EUR 256,6 million in the prior year.

However, the overall result for the year, which reflects fluctuations in the Bank’s assets during the year, rose by EUR 525,6 million for a balance of EUR 299,6 million as of 31 December 2018, mainly due to favourable changes in stock prices.

ANALYSIS OF MAIN BALANCE SHEET ITEMS

In view of the transition from IAS 39 to IFRS 9 and the entries for first-time application of the new standard on 1 January 2018, the comments on changes in the balance sheet items are based on the figures at 31 December 2018 compared with the opening balance sheet figures as of 1 January 2018 and not on the closing balance sheet position at 31 December 2017 for comparability reasons.

The balance sheet totalled EUR 45.983,6 million at 31 December 2018, an increase of EUR 626,5 million compared with 1

January 2018, mainly due to the increase in deposits from non-bank customers.

On the asset side of the balance sheet, “Cash and sight accounts with central banks” fell by EUR 1.290,3 million to EUR 4.237,2 million, mainly because of the decrease in assets deposited with Banque centrale du Luxembourg (BCL).

Outstanding fixed-income securities recognised at amortised cost amounted to EUR 14.226,7 million, up 1.312,7 million compared with the 1 January 2018.

The outstanding amount of financial assets mandatorily measured at fair value through profit or loss totalled EUR 1.234,8 million, an increase of EUR 17,2 million compared with 1 January 2018, mainly due to the increase in stock prices. This item includes financial instruments that do not qualify for measurement at amortised cost and are therefore to be measured at fair value through profit or loss.

The outstanding amount of variable-income securities measured at fair value through the revaluation reserve was EUR 863,4 million, an increase of 163,9 million compared with 1 January 2018, due to the increase in the stock prices of certain shareholdings and, secondarily, through the movements in and out during the year.

Compared with 1 January 2018, the outstanding amount of loans to credit institutions decreased by EUR 704,1 million to EUR 2.580,6 million at 31 December 2018. This item also includes the Bank’s deposits with other banks, whether or not they are collateralised with securities.

Outstanding customer loans totalled EUR 21.796,2 million at 31 December 2018, an increase of EUR 1.016,4 million since 1 January 2018. The increase was driven by the development of the housing loan and corporate loan businesses, illustrating the continued desire of Spuerkeess to support the projects of individuals and businesses in the country.

On the liabilities side of the balance sheet, issues of securities decreased by EUR 61,7 million to EUR 3.798,2 million. This decrease was mainly due to the redemption of certificates of deposit, an activity that was discontinued in 2015.

Credit institution deposits increased by EUR 64,8 million to EUR 4.840,8 million. This item also includes the Bank’s loans from other banks, whether or not they are collateralised with securities.

Customer deposits totalled EUR 31.877,1 million, an increase of EUR 400,0 million. This growth was driven by strong inflows of deposits from corporates and individuals. Public sector deposits decreased significantly, as changes in this item are more volatile and depend on the State’s needs and cash management policy.

In accordance with Article 38-4 of the Law on the Financial Sector, the Spuerkeess group reported its return on assets, which stood at 0,35% versus 0,56% in the prior year.

CHANGE IN OWN FUNDS

The Spuerkeess Group’s total equity attributable to owners of the parent company amounted to EUR 4.346,8 million as at 31 December 2018 compared with EUR 4.236,7 million at the end of 2017, i.e. an increase of 2,6%.

This increase in equity of EUR 110,1 million was due to a negative impact of EUR 122,9 million of the first-time application of IFRS 9, an increase in consolidated reserves of EUR 157,9 million, a decrease in income of EUR 97,6 million and an increase in the reserve of EUR 172,7 million.

2019 OUTLOOK

In an economic environment characterised by persistent political uncertainty and therefore moderate growth and inflation prospects, the central banks remain very cautious in the conduct of monetary policy. The European Central Bank's recent comments and statements suggest that short- and medium-term interest rates will still remain very low throughout 2019.

The Bank therefore expects continued pressure on its interest margin as opportunities to re-use excess liquidity are negatively impacted by the environment of low rates in the short term. However, unless an acute economic or political crisis bursts onto the scene in Europe, the cost of credit risk should not see any significant negative changes.

While the 2018 financial year results reflect the fact that the Bank, like other credit institutions, is suffering from the consequences of an environment of historically low interest rates and a margin squeeze due to increased competition, it is important to keep in mind the exceptional factors that contributed to the decline in the 2018 financial year, as further described in this management report.

Spuerkeess is a systemic bank of paramount importance for the Luxembourg financial and banking system and a leading shareholder in other areas of Luxembourg's economic and industrial activity. Consequently, volatility in the results of these companies has an impact on the Bank's accounts because of its role as a contributor to the country's economic and social development.

During 2019, the Board of Directors and the Executive Committee, together with the Bank's staff, will lay the groundwork for the development of a new multi-annual strategic programme that will enable Spuerkeess to confirm its position as a leader in the Luxembourg banking sector and a preferred partner for customers in all segments. This strategic programme will involve innovation in banking products and services, development of distribution channels at both the branch and digital levels and consideration of national, European and international socioeconomic developments.

Against this backdrop, the Executive Committee confirms that the Bank will continue to fully assume its mission of supporting the national economy. To that end, the Bank will contribute to promoting sustainable development of the economy while respecting its corporate social responsibility commitments.

EVENTS AFTER THE REPORTING PERIOD

No significant events that could impact the normal course of the Spuerkeess Group's business occurred after the close of the 2018 financial year.

Luxembourg, 27 March 2019

For the Executive Committee

Guy ROSSELJONG	Françoise THOMA
Deputy Chief Executive Officer	Chief Executive Officer President of the Executive Committee

BANQUE ET CAISSE D'EPARGNE DE L'ETAT, LUXEMBOURG

STATUTORY AUDITOR'S REPORT
31 December 2018

REPORT OF THE "REVISEUR D'ENTREPRISES AGREE"

To the Executive Committee of
Banque et Caisse d'Epargne de l'Etat, Luxembourg
1, place de Metz
L-2954 Luxembourg

Report on the audit of the consolidated annual accounts

Opinion

We have audited the consolidated annual accounts of Banque et Caisse d'Epargne de l'Etat, Luxembourg, (the "Bank") and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and the notes to the consolidated annual accounts, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated annual accounts give a true and fair view of the consolidated financial position of the Group as at 31 December 2018, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union.

Basis for Opinion

We conducted our audit in accordance with the EU Regulation N° 537/2014, the Law of 23 July 2016 on the audit profession (Law of 23 July 2016) and with International Standards on Auditing (ISAs) as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" (CSSF). Our responsibilities under those Regulation, Law and standards are further described in the section « Responsibilities of "Réviseur d'Entreprises Agréé" for the Audit of the Consolidated Annual Accounts » of our report. We are also independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) as adopted for Luxembourg by the CSSF together with the ethical requirements that are relevant to our audit of the consolidated annual accounts, and have fulfilled our other ethical responsibilities under those ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated annual accounts of the current year. These matters were addressed in the

context of the audit of the consolidated annual accounts as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

1. Classification and valuation of fixed income financial instruments and valuation of derivative instruments

Fixed income financial instruments and derivatives held by the Group are presented in the consolidated annual accounts as financial instruments held for trading, hedging derivative financial instruments, financial assets mandatorily at fair value through the statement of profit and loss and fixed income securities at amortized cost. As of 31 December 2018, these instruments represent a net book value of EUR 15,7 billion, representing 34,1% of the balance sheet of the Group.

According to the requirements of the new IFRS 9 standard related to the classification and measurement of financial assets, fixed income financial instruments have to be recorded at amortized cost or at fair value, depending upon their classification. This classification depends on the management intention ("business model") and the outcome of the "SPPI" (Solely Payments of Principal and Interest) test which determines the measurement method to be used. On that basis and in the context of the first-time adoption of the IFRS 9 standard on 1 January 2018, the Bank has reclassified an amount of EUR 8,6 billion from its portfolio "Available-for-sale securities – Fixed income securities" to the portfolio "Fixed income securities at amortized cost".

The other fixed income instruments and derivative instruments have been classified at fair value in other portfolios. The fair value measurement of fixed income financial instruments and derivatives is inherently complex due to nature of some instruments, the availability of prices on an active market and/or limited availability of observable data. For certain instruments, the limited availability of such information increases the degree of subjectivity of their valuation, therefore requiring management judgment.

As of 31 December 2018, 90,3% of the financial instruments have been measured at amortized cost and 9,7% of the other fixed income financial instruments and derivatives are measured at fair value. We consider the classification and measurement of such fixed income financial instruments and the measurement of derivative financial instruments to be a key audit matter because of their importance to the presentation of the consolidated financial situation and the necessary degree of judgment required to determine the fair value for certain of these assets.

How the matter was addressed in our audit

In relation with the classification of fixed income financial instruments, we have verified whether the conditions established in the "Business model" of the Group are respected and have proceeded with walkthroughs and tests of controls related to the classification process (SPPI test). Also, the correct classification of these instruments in asset classes measured at amortized cost or at fair value has been verified based on a sample of such assets based on a random approach.

For financial instruments, including derivatives instruments, we have verified the effectiveness of key controls of the valuation process related to the input of such instruments in the management or accounting tools operated by the Group and the application of appropriate valuation methods by the latter.

Financial instruments presented as assets in the balance sheet, including derivative instruments, were subject to verifications to ensure that the book values recorded by the Group have been correctly determined and recorded. For that purpose, the approach applied in determining the amortized cost has been analyzed. Financial instruments measured at fair value, as well as financial

derivative instruments were subject to an independent valuation or validation of the valuation method based on a randomly selected sample.

2. Depreciation of loans and advances at amortized cost for “Corporate” customers

Loans and advances to “Corporate” customers represent a key activity of the Group and are recorded in the annual consolidated annual accounts under the section Loans and advances at amortized cost – Customers. These loans and advances are accounted at amortized cost, less value adjustment for expected credits losses. They represent on the asset side of the balance sheet a net exposure of EUR 5,5 billion, including a balance of expected credit losses for individual risks of EUR 86,4 million.

The application of value adjustments to such instruments requires judgment by the Executive Committee which is based on a credit analysis prepared by the department in-charge of credit risk monitoring following the principles of the IFRS 9 standard regarding the determination of depreciations for expected credit losses. Such principles were applied for the first time in the year ended 31 December 2018. This calculation is based on a categorization of all credits based on their internal ratings (staging) and on estimates primarily related to probabilities of defaults and effective exposures in the moment of default.

The process to determine expected losses is based on numerous factors and is inherently complex, and includes a certain degree of judgment in identifying quantitative and qualitative factors of a significant increase in credit risk and to determine the required levels of depreciations needed.

We have considered the depreciations of loans and advances to “Corporate” customers as a key audit matter because of the level of judgment required for their determination, the first-time adoption of the modalities to compute value adjustments for expected credit losses as defined by the IFRS 9 standard as well as because of their importance for the presentation of the consolidated financial position and the consolidated statement of comprehensive income for the year ended 31 December 2018.

How the matter was addressed in our audit

Within the context of the audit, we proceeded with walkthroughs and test of controls related to the identification process of overdue exposures of the Group, the periodical review of such exposures, the verification of the elaboration of a list of specific provisions and consideration of others quantitative indicators, as defined by the Group.

We made interviews with heads of departments regarding the approach applied by the Group in the context of the first-time adoption of the IFRS 9 standard. More specifically, we have analyzed the approach applied by the Group to proceed with the categorization of loans and advances for “Corporate” customers (staging) and to estimate the qualitative and quantitative data used as a basis for the computation of credits impairments.

We have examined the internal control environment of the Group related to the appreciation of the level of impairment of loans and advances through interviews, the review of key controls, the review of the governance and decision-making process as well as the validation by Management of the level of specific impairment for these exposures.

For impaired loans and advances, we assessed on a sample basis the reasonableness of the amount of impairment. Our procedures have, among others, included the verification of information related to

the files and, where applicable, a verification that the existence and valuation of collateral was duly considered.

In addition, based on a sample of loans and advances with low internal ratings, we have ensured that the latter should not have been subject to an impairment due to particular circumstances.

Other information

The Executive Committee is responsible for the other information which is subject to the approval of the Board of Directors. The other information comprises the information included in the consolidated management report and the Corporate Governance Statement but does not include the consolidated annual accounts and our report of “réviseur d’entreprises agréé” thereon.

Our opinion on the consolidated annual accounts does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated annual accounts, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated annual accounts or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report this fact. We have nothing to report in this regard.

Responsibilities of the Executive Committee and the Board of Directors for the Consolidated Annual Accounts

The Executive Committee is responsible for the preparation and fair presentation of the consolidated annual accounts in accordance with IFRS as adopted by the European Union, and for such internal control as the Executive Committee determines is necessary to enable the preparation of consolidated annual accounts that are free from material misstatement, whether due to fraud or error. Such consolidated annual accounts are subject to approval by the Board of Directors pursuant the organic Law of 24 March 1989.

In preparing the consolidated annual accounts, the Executive Committee is responsible for assessing the Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Executive Committee either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group’s financial reporting process.

Responsibilities of the “Réviseur d’Entreprises Agréé” for the Audit of the Consolidated Annual Accounts

The objectives of our audit are to obtain reasonable assurance about whether the consolidated annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue a report of “Réviseur d’Entreprises Agréé” that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the EU Regulation N° 537/2014, the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF will always detect a material misstatement when it exists. 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 consolidated annual accounts.

As part of an audit in accordance with the EU Regulation N° 537/2014, the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated annual accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Executive Committee.

- Conclude on the appropriateness of the Executive Committee use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our report of "Réviseur d'Entreprises Agréé" to the related disclosures in the consolidated annual accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our report of "Réviseur d'Entreprises Agréé". However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated annual accounts, including the disclosures, and whether the consolidated annual accounts represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated annual accounts. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated annual accounts of the current year and are therefore the key audit matters. We describe these matters in our report unless law or regulation precludes public disclosure about the matter.

Report on Other Legal and Regulatory Requirements

We have been appointed as “Réviseur d’Entreprises Agréé” by the Government of the Grand-Duché of Luxembourg on 21 June 2017 and the duration of our uninterrupted engagement, including previous renewals and reappointments, is one year.

The consolidated management report is consistent with the consolidated annual accounts and has been prepared in accordance with applicable legal requirements.

The corporate governance statement, included in the consolidated management report, is the responsibility of the Executive Committee. The information required by article 70bis paragraph 1 of the law of 17 June 1992 relating to the annual and consolidated accounts of credit institutions governed by the laws of Luxembourg, as amended, is consistent with the consolidated annual accounts and has been prepared in accordance with applicable legal requirements.

We confirm that the audit opinion is consistent with the additional report to the audit committee or equivalent.

We confirm that the prohibited non-audit services referred to in the EU Regulation No 537/2014 were not provided and that we remain independent of the Group in conducting the audit.

Other points

The consolidated annual accounts of the Banque et Caisse d’Epargne de l’Etat, Luxembourg as of 31 December 2017 have been audited by another “Réviseur d’entreprises agréé”, who expressed an opinion without qualification on the consolidated annual accounts on 22 March 2018.

Other subject

The declaration of the corporate governance includes the information required by the article 70 bis paragraph (1) of the modified law of 17 June 1992 related to the annual and consolidated accounts of credit institutions governed by the law of Luxembourg.

Ernst & Young
Société Anonyme
Cabinet de révision agréé

Christoph Haas

Luxembourg, 27 March 2019

Only the French version of the present report has been reviewed by the auditors. In case of differences between the French version and the translation, the French version should be retained.

BANQUE ET CAISSE D'EPARGNE DE L'ETAT, LUXEMBOURG

AUDITED CONSOLIDATED FINANCIAL STATEMENTS
31 December 2018

Consolidated balance sheet as at 31 December 2018

ASSETS in euros	**Notes**	**31/12/2017**	**31/12/2018**
Cash and sight accounts with central banks	4.1.	5.527.885.100	4.237.236.592
Loans and advances at amortised cost – Credit institutions	4.2.	3.671.386.893	2.580.582.943
Loans and advances at amortised cost - Customers	4.3.	20.912.775.444	21.796.184.932
Financial instruments held for trading	4.4. 4.14.	85.338.534	220.216.547
Hedging derivative financial instruments	4.14.	93.957.657	65.470.560
Financial assets designated at fair value through profit or loss	4.5.	548.117.498	
Financial assets mandatorily measured at fair value through profit or loss	4.6		1.234.840.351
Available-for-sale securities – Fixed-income securities	4.7.	9.134.090.462	
Fixed-income securities recognised at amortised cost	4.8		14.226.659.024
Available-for-sale securities – Variable-income securities	4.7.	832.066.938	
Variable-income securities recognised at fair value through the revaluation reserve	4.9		863.396.081
Held-to-maturity securities	4.10.	3.946.383.118	
Investments in associates accounted for using the equity method	4.11.	378.120.296	355.552.522
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	4.15.	46.597.287	69.027.154
Tangible assets for own use	4.16.	288.343.606	277.961.253
Investment property	4.17.	13.727.120	12.762.728
Intangible assets	4.18.	18.605.053	27.475.050
Deferred taxes	4.19.	-	2.273.119
Other assets	4.20.	11.561.278	13.963.485
TOTAL ASSETS		**45.508.956.284**	**45.983.602.339**

LIABILITIES in euros	**Notes**	**31/12/2017**	**31/12/2018**
Deposits at amortised cost – Credit institutions	4.21.	4.776.023.875	4.840.845.065
Deposits at amortised cost – Customers	4.22.	31.477.133.430	31.877.149.050
Financial instruments held for trading	4.4. 4.14.	202.116.831	133.331.389
Hedging derivative financial instruments	4.14.	588.498.489	606.826.289
Financial liabilities designated at fair value through profit or loss	4.23.	146.853.974	151.566.706
Issuance of debt securities	4.24.	3.713.017.053	3.646.594.429
Provisions	4.25.	3.594.463	21.825.180
Other liabilities	4.26.	35.423.570	83.759.400
Current taxes	4.19.	62.045.799	46.813.738
Deferred taxes	4.19.	64.812.580	–
Pension fund	4.27.	199.816.171	225.285.987
Sub-total of LIABILITIES (before equity capital) to be carried forward		**41.269.336.236**	**41.633.997.232**

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

Consolidated balance sheet as at 31 December 2018 (continued)

EQUITY in euros	**31/12/2017**	**31/12/2018**
Sub-total of LIABILITIES (before equity capital) carried forward	**41.269.336.236**	**41.633.997.232**
Share capital	173.525.467	173.525.467
Revaluation reserve	455.873.461	539.724.951
o *Available-for-sale assets*	*453.444.064*	
o *Variable-income securities recognised at fair value through the revaluation reserve*		*537.630.440*
Consolidated reserves	3.350.713.675	3.474.618.717
° *Equity method adjustment*	*287.422.805*	*288.716.938*
° *Gains or losses on disposals of variable-income securities measured at fair value*		*688.104*
Income for the year	256.610.845	158.938.807
Sub-total of equity attributable to equity holders of the parent company	4.236.723.448	4.346.807.942
Minority interests	2.896.600	2.797.165
Total equity	**4.239.620.048**	**4.349.605.107**
TOTAL LIABILITIES, including EQUITY	**45.508.956.284**	**45.983.602.339**

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

Consolidated income statement as at 31 December 2018

in euros	Notes	31/12/2017	31/12/2018
Interest income	5.1.	363.611.577	356.707.138
Income from variable-income securities	5.2.	47.388.545	31.356.637
Fee and commission income	5.3.	141.253.115	145.805.502
INCOME FROM INTEREST, DIVIDENDS AND FEES AND COMMISSIONS		**552.253.237**	**533.869.277**
Income from financial instruments not recognised at fair value through profit or loss	5.4.	24.411.845	337.906
Income from financial instruments held for trading	5.5.	9.660.650	5.789.730
Income from financial instruments designated at fair value through profit or loss	5.6.	4.840.448	-2.612.343
Income from financial instruments mandatorily measured at fair value through profit or loss	5.7.		-13.366.171
Income from hedging transactions	5.8.	2.619.890	2.587.336
Exchange gains or losses		8.567.482	12.688.151
Other operating income	5.9.	20.383.067	14.141.187
Other operating expenditure	5.9.	-36.822.128	-42.727.204
BANKING INCOME		**585.914.491**	**510.707.869**
Personnel expenses	5.10.	-209.842.654	-224.496.933
Other administrative expenses	5.11.	-88.826.996	-86.729.345
Depreciation allowances for tangible and intangible assets	5.12. 5.13. 5.14.	-33.059.168	-34.845.391
INCOME AFTER GENERAL EXPENSES		**254.185.673**	**164.636.200**
Net allowances for impairment of individual and collective credit risks	5.15.	15.774.364	20.235.650
Provisions	5.16.	1.288.771	1.961.888
Share in the profit of equity-accounted associates		37.512.788	12.440.217
INCOME BEFORE TAXES AND NON-CURRENT ASSETS		**308.761.596**	**199.273.955**
Profit from non-current assets and disposal groups classified as held for sale and not qualifying as discontinued operations		1.081.909	258.589
Tax on income from continuing operations	5.17.	-63.482.573	-49.096.004
Deferred taxes	5.17.	12.487.419	10.541.836
INCOME FOR THE YEAR		**258.848.350**	**160.978.376**
of which income for the year attributable to			
- *minority interests*		*2.237.505*	*2.039.569*
- *equity holders of the parent*		*256.610.845*	*158.938.807*

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

Consolidated statement of comprehensive income as at 31 December 2018

in euros	31/12/2017	31/12/2018
INCOME FOR THE YEAR	258.848.350	160.978.376
Items not reclassified in net income subsequently	**-17.864.357**	**141.030.477**
Actuarial gains/(losses) on the defined-benefit pension scheme	10.676.221	-44.317.761
Contribution of equity-accounted associates	-22.261.858	1.502.053
Variable-income securities recognised at fair value through the revaluation reserve		170.237.760
° *Variation in measurement results*		*169.429.361*
° *Income from sales*		*808.399*
Impact of deferred taxes	-6.278.720	13.608.425
Items to be reclassified in net income subsequently	**-205.902.240**	**-334.886**
Available-for-sale assets	-196.635.592	
° *Variation in measurement results*	*-171.901.420*	
° *Net reclassification to the income statement of realised net gains*	*-24.734.172*	
Cash flow hedges	3.427.007	-452.610
Impact of deferred taxes	-12.693.655	117.724
Total items of comprehensive income for the year - net of tax	**-223.766.597**	**140.695.590**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	35.081.753	301.673.966
share attributable to		
- *minority interests*	*2.237.505*	*2.039.569*
- *equity holders of the parent*	*-226.004.102*	*299.634.397*

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity as at 31 December 2018

During the 2018 financial year, the Group's parent company appropriated EUR 40.000.000 (same as in 2017) from its 2017 net income to the State. Own funds were reinforced by an allocation of EUR 216.610.845 to the reserve.

in euros	Share capital	Consolidated reserves	Revaluation reserve	Net income	Total equity – holders of the parent	Minority interests	Total equity
As at 1 January 2018	**173.525.467**	**3.350.713.675**	**455.873.461**	**256.610.845**	**4.236.723.448**	**2.896.600**	**4.239.620.048**
FTA impact*	-	**-34.014.646**	**-88.836.267**	-	**-122.850.913**	-	**-122.850.913**
As at 1 January 2018 after FTA	**173.525.467**	**3.316.699.029**	**367.037.194**	**256.610.845**	**4.113.872.535**	**2.896.600**	**4.116.769.135**
Appropriation of 2017 income	-	256.610.845	-	-256.610.845	-	-	-
2018 net income	-	-	-	158.938.807	158.938.807	2.039.569	160.978.376
Distribution for FY 2017	-	-40.000.000	-	-	-40.000.000	-	-40.000.000
Actuarial gains/(losses) on pension fund	-	-32.790.712	-	-	-32.790.712	-	-32.790.712
Value adjustment on financial instruments measured at fair value through the revaluation reserve net of deferred taxes	-	-	173.022.644	-	173.022.644	-	173.022.644
Net measurement results of cash flow hedges	-	-	-334.886	-	-334.886	-	-334.886
Other		-25.900.447	-	-	-25.900.447	-2.139.004	-28.039.451
As at 31 December 2018	**173.525.467**	**3.474.618.717**	**539.724.951**	**158.938.807**	**4.346.807.942**	**2.797.165**	**4.349.605.107**

in euros	Share capital	Consolidated reserves	Revaluation reserve	Net income	Total equity – holders of the parent	Minority interests	Total equity
As at 1 January 2017	**173.525.467**	**3.133.980.137**	**661.775.701**	**259.792.789**	**4.229.074.094**	**2.541.387**	**4.231.615.481**
Appropriation of 2016 income	-	259.792.789	-	-259.792.789	-	-	-
2017 net income	-	-	-	256.610.845	256.610.845	2.237.505	258.848.350
Distribution for FY 2016	-	-40.000.000	-	-	-40.000.000	-	-40.000.000
Actuarial gains/(losses) on pension fund	-	4.397.500	-	-	4.397.500	-	4.397.500
Net measurement results of available-for-sale financial instruments	-	-	-208.436.348	-	-208.436.348	-	-208.436.348
Net measurement results of cash flow hedges	-	-	2.534.107	-	2.534.107	-	2.534.107
Other	-	-7.456.749	-	-	-7.456.749	-1.882.292	-9.339.041
As at 31 December 2017	**173.525.467**	**3.350.713.675**	**455.873.461**	**256.610.845**	**4.236.723.448**	**2.896.600**	**4.239.620.048**

* First-Time Adoption of IFRS 9: details provided in Note 2.2.1

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

Consolidated statement of cash flow as at 31 December 2018

in euros	31/12/2017	31/12/2018
Cash and cash equivalents		
Cash and sight accounts with central banks	5.525.500.027	4.237.468.414
Loans and receivables at amortised cost – Credit institutions	1.376.072.568	417.447.145
Loans and receivables at amortised cost – Customers	1.831.874.968	1.764.647.029
Financial instruments held for trading	-	-
Total	**8.733.447.563**	**6.419.562.587**

The statement of cash flows represents the inflow and outflow of cash. Cash and cash equivalents include cash on hand, deposits with central banks, and assets with an original maturity of less than 90 days.

The cash flow statement classifies the cash flows of the period into operating activities, investment activities and financing activities.

The Group uses the indirect method to determine the cash flows. To do this, the Group eliminates from the net result all pure accounting flows that do not translate into an inflow or outflow of liquid funds and directly presents the items of the net result arising from operating activities before changes in operating assets and liabilities.

Cash flow from operating activities

Operating activities are the main income-generating activities. They comprise all activities other than investment or financing. They consist of the operating income and expenses, cash flows relating to financial and other income and expenses, as well as the different categories of taxes paid during the year.

- Cash flow from operating activities before changes in operating assets and liabilities:

in euros	31/12/2017	31/12/2018
Interest received	880.344.814	888.784.295
Interest paid	-523.847.918	-514.664.025
Income from variable-income securities	47.388.545	31.356.637
Fees and commissions received	181.725.208	187.267.795
Fees and commissions paid	-40.472.093	-41.462.293
Other operating income	20.382.629	14.131.223
Other operating expenditure	-35.303.148	-42.399.212
Current taxes	-63.482.573	-49.096.004
General and administrative expenses	-284.699.185	-297.071.542
Sub-total	**182.036.279**	**176.846.874**

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

- Cash flow from changes in operating assets:

Net changes in euros	31/12/2017	31/12/2018
Financial instruments held for trading	1.462.493	2.562.553
Financial assets designated at fair value through profit or loss	-286.638.122	548.749.582
of which reclassification to financial assets mandatorily measured at fair value through profit or loss		*548.749.582*
Available-for-sale securities – Fixed-income securities	562.513.204	8.855.384.038
of which reclassification to fixed-income securities at amortised cost		*8.313.941.138*
of which reclassification to financial assets mandatorily measured at fair value through profit or loss		*541.442.900*
Available-for-sale securities – Variable-income securities	10.331.647	181.884.650
of which reclassification to variable-income securities measured at fair value through the revaluation reserve		*59.188.734*
of which reclassification to financial assets mandatorily measured at fair value through profit or loss		*122.695.916*
Variable-income securities recognised at fair value through the revaluation reserve		-59.188.734
of which reclassification of available-for-sale securities – Variable-income securities		*-59.188.734*
Financial assets mandatorily recognised at fair value through profit or loss		-1.245.987.137
of which reclassification of available-for-sale securities – Fixed-income securities		*-541.442.900*
of which reclassification of financial assets designated at fair value through profit or loss		*-548.749.582*
of which reclassification of available-for-sale securities – Variable-income securities		*-122.695.916*
Loans and advances at amortised cost – Credit institutions	616.312.334	137.608.847
of which reclassification to fixed-income securities at amortised cost		*386.116.585*
Loans and advances at amortised cost - Customers	-992.193.516	-1.000.237.151
of which reclassification to fixed-income securities at amortised cost		*91.256.664*
Hedging derivative financial instruments	13.957.560	500.312
Other assets	-36.468.832	-35.309.857
Sub-total	**-110.723.233**	**7.385.967.103**

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

- Cash flow from changes in operating liabilities:

Net changes in euros	31/12/2017	31/12/2018
Financial instruments held for trading	7.893.983	6.986.485
Financial liabilities designated at fair value through profit or loss	-348.421	259.880
Deposits at amortised cost – Credit institutions	-65.626.500	166.788.027
Deposits at amortised cost – Customers	3.364.136.388	400.641.472
Hedging derivative financial instruments	11.636.221	52.531.815
Other liabilities	-23.737.769	47.806.914
Issuance of debt securities	-1.055.884.808	-86.351.220
Sub-total	**2.238.069.094**	**588.663.373**
Cash flow from operating activities	**2.309.382.141**	**8.151.477.350**

Cash flow from investment activities

in euros	31/12/2017	31/12/2018
Acquisition of available-for-sale securities – Variable-income securities	-1.100.000	
Disposals of available-for-sale securities – Variable-income securities	23.844.685	
Acquisition of variable-income securities		-1.770.222
Disposals of variable-income securities		761.158
Acquisition of investments in associates accounted for using the equity method	-	-1.391.835
Disposal of investments in associates accounted for using the equity method	-	4.155.690
Acquisition of held-to-maturity securities	-896.517.406	
Redemption of held-to-maturity securities	1.523.141.920	
Acquisition of fixed-income securities at amortised cost		-3.800.601.115
Reclassification of available-for-sale securities to fixed-income securities at amortised cost		-8.313.941.138
Reclassification of loans and advances at amortised cost to fixed-income securities at amortised cost		-477.373.249
Disposal/redemption of fixed-income securities at amortised cost		2.433.951.698
Acquisitions/disposals of intangible and tangible assets	-23.427.723	-31.906.069
Cash flow from investment activities	**625.941.477**	**-10.188.115.083**

Investing activities comprise the acquisition and disposal of assets in the long term and all other investments not included in cash equivalents.

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

Cash flow from financing activities

Financing activities comprise activities leading to changes in the breadth and composition of equity, and subordinated capital issued by the Bank.

in euros	31/12/2017	31/12/2018
Proceeds from subordinated liabilities	-	-
Income distribution	-40.000.000	-40.000.000
Cash flow from financing activities	**-40.000.000**	**-40.000.000**

Reconciliation of cash flows from financing activities

in euros	01/01/2017	Cash flow	Unrelated to cash flow	31/12/2017
Proceeds from subordinated liabilities	101.479.685	-	-508.644	100.971.040

in euros	01/01/2018	Cash flow	Unrelated to cash flow	31/12/2018
Proceeds from subordinated liabilities	100.971.040	-	-488.003	100.483.038

Net change in cash

in euros	31/12/2017	31/12/2018
Cash flow from operating activities	2.309.382.141	8.151.477.350
Cash flow from investment activities	625.941.477	-10.188.115.083
Cash flow from financing activities	-40.000.000	-40.000.000
Net change in cash	**2.895.323.617**	**-2.076.637.733**

Change in cash and cash equivalents

in euros	2017	2018
Situation as at 1 January	**5.558.882.703**	**8.733.447.563**
Net change in cash	2.895.323.617	-2.076.637.733
Effect of exchange rates on cash and cash equivalents	279.241.243	-237.247.243
Situation as at 31 December	**8.733.447.563**	**6.419.562.587**

The notes on pages 38 to 167 are an integral part of these consolidated financial statements.

BANQUE ET CAISSE D'EPARGNE DE L'ETAT, LUXEMBOURG

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 December 2018

1 GENERAL INFORMATION

Banque et Caisse d'Epargne de l'Etat, Luxembourg (hereinafter the "Bank" or the "Group's parent company"), established by the law of 21 February 1856 and governed by the law of 24 March 1989, is a self-governing public law institution endowed with legal personality. Ultimate responsibility for the institution lies with the Government Minister with responsibility for the Treasury.

The Bank is subject to Luxembourg's banking regulations, particularly the law of 5 April 1993 on the financial sector. Starting on 4 November 2014, with the entry into force of the Single Supervisory Mechanism (SSM), the European Central Bank has taken over prudential supervision of BCEE.

The Bank's registered office is located at 1, place de Metz, L-2954 Luxembourg.

Within the limits set by the laws and regulations applicable to credit institutions, the objective of the Bank is to perform all financial and banking activities, as well as all similar, related or ancillary operations.

The consolidated financial statements concern the Group, of which Banque et Caisse d'Epargne de l'Etat, Luxembourg is the parent company. The Group had an average headcount in 2018 of 1.877 people (1.843 in 2017), including staff on skills-acquisition contracts.

The Group's commercial activity is carried out from the territory of the Grand Duchy of Luxembourg.

The financial year coincides with the calendar year.

The consolidated financial statements were approved by the Board of Directors meeting on 27 March 2019.

2 BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

2.1 Compliance with general accounting principles

The Group's consolidated financial statements for the 2018 financial year have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union.

The consolidated financial statements are stated in euros, the functional currency of the parent company and its subsidiaries. They have been prepared on the basis of historical cost or amortised cost, adjusted to fair value for the recognition of financial assets mandatorily measured at fair value through profit or loss, financial assets held for trading and derivatives. Variable-income securities and pension fund assets are recognised at fair value through the revaluation reserve.

2.1.1 New or revised standards adopted by the European Union, applicable since 1 January 2018

The following standards impacted the Group:

- IFRS 9 (standard) "Financial Instruments", refer to Section 2.2.1;
- IFRS 15 (standard and amendments) "Revenue from Contracts with Customers", refer to Section 2.2.2.

The following standards have no impact on the Group:

- IFRS 4 (amendments) "Applying IFRS 9 Financial Instruments with IFRS 4";
- "Improvements to IFRS, 2014-2016 cycle", which are a series of amendments to the existing standards;
- IFRS 2 (amendments) "Classification and Measurement of Share-based Payment Transactions";
- IAS 40 (amendments) "Transfers of Investment Property";
- IFRIC 22 "Foreign Currency Transactions and Advance Consideration".

2.1.2 New or revised standards adopted by the European Union but not yet applicable as of 1 January 2018

The following standard will have an impact on the Group. Please refer to Note 2.2.3: IFRS 16 "Leases" (applicable from 1 January 2019).

The following standards are not expected to impact the Group:

- IFRIC 23 "Uncertainty over Income Tax Treatments" (applicable from 1 January 2019);
- IFRS 9 (amendments) "Prepayment Features with Negative Compensation" (applicable from 1 January 2019).

2.1.3 New or revised standards not yet adopted by the European Union and not applicable as of 1 January 2018

The following standards are not expected to impact the Group:

- IAS 28 (amendments) "Long-term Interests in Associates and Joint Ventures" (applicable from 1 January 2019);
- "Improvements to IFRS, 2015–2017 cycle" (applicable from 1 January 2019);
- IAS 19 (amendments) "Plan Amendment, Curtailment Or Settlement" (applicable from 1 January 2019);
- "Amendments to the Conceptual Framework for Financial Reporting" (applicable from 1 January 2020);
- IFRS 3 (amendments) "Business Combinations" (applicable from 1 January 2020);
- Amendments to IAS 1 and IAS 8 "Definition of Material" (applicable from 1 January 2020);

The following standard could have an impact on the Group:

- IFRS 17 (standard) "Insurance Contracts" (application postponed until 1 January 2022 by the IASB).

2.2 Impact of new standards for the Group

2.2.1 IFRS 9 "Financial Instruments" (applicable from 1 January 2018)

IFRS 9 "Financial Instruments" replaced IAS 39 on 1 January 2018. The Group's parent company has adopted the part on classification and valuation of financial instruments and the part on value adjustments on financial instruments.

However, the Group's parent company has taken the option provided under the standard to continue to apply IAS 39 for hedge accounting pending a final standard on macro-hedging. The Group retroactively applies IFRS 9 without providing comparative data for the 2017 financial year.

2.2.1.1 Reclassifications of financial instruments

The following tables illustrate the transition from IAS 39 to IFRS 9 and thus detail the various transfers between accounting categories:

ASSETS	Ref.	31/12/2017	Reclassification	Change in valuation		01/01/2018
				Impairment	Other	
Cash and sight accounts with central banks		**5.527.885.100**	-	**-302.352**	-	**5.527.582.748**
Loans and advances at amortised cost		**24.584.162.337**	**-474.547.243**	**-44.526.232**	**-661.485**	**24.064.427.377**
to Fixed-income securities recognised at amortised cost	A	-	*-474.547.243*	-	-	-
Financial instruments held for trading		**85.338.534**	**4.056.704**	-	-	**89.395.238**
from Hedging derivative financial instruments	H		*4.056.704*	-	-	-
Hedging derivative financial instruments		**93.957.657**	**-4.056.704**	-	-	**89.900.953**
to Financial instruments held for trading	H		*-4.056.744*	-	-	-
Financial assets designated at fair value through profit or loss		**548.117.498**	**-548.117.498**	-	-	-
to Financial assets mandatorily measured at fair value through profit or loss	D	-	*-548.117.498*	-	-	-
Financial assets mandatorily recognised at fair value through profit or loss		-	**1.217.592.536**	**12.333.606**	**-12.333.606**	**1.217.592.536**
from Available-for-sale securities – Fixed-income securities	C	-	*536.884.305*	-	-	-
from Financial assets designated at fair value through profit or loss	D	-	*548.117.498*	-	-	-
from Available-for-sale securities – Variable-income securities	G	-	*132.590.733*	-	-	-
Available-for-sale securities – Fixed-income securities		**9.134.090.462**	**-9.134.090.462**	-	-	-
to Fixed-income securities recognised at amortised cost	B	-	*-8.597.206.157*	-	-	-
to Financial assets mandatorily measured at fair value through profit or loss	C	-	*-536.884.305*	-	-	-
Fixed-income securities recognised at amortised cost		-	**13.018.136.518**	**-7.381.275**	**-96.755.075**	**12.914.000.168**
from Loans and advances at amortised cost	A	-	*474.547.243*	-	-	-
from Available-for-sale securities – Fixed-income securities	B	-	*8.597.206.157*	-	-	-
from Held-to-maturity securities	E	-	*3.946.383.118*	-	-	-
Available-for-sale securities – Variable-income securities		**832.066.938**	**-832.066.938**	-	-	-
to Variable-income securities measured at fair value through the revaluation reserve	F	-	*-699.476.205*	-	-	-
to Financial assets mandatorily measured at fair value through profit or loss	G	-	*-132.590.733*	-	-	-
Variable-income securities recognised at fair value through the revaluation reserve		-	**699.476.205**	-	-	**699.476.205**
from Available-for-sale securities – Variable-income securities	F	-	*699.476.205*	-	-	-
Held-to-maturity securities		**3.946.383.118**	**-3.946.383.118**	-	-	-
to Fixed-income securities recognised at amortised cost	E		*-3.946.383.118*	-	-	-
Investments in associates accounted for using the equity method		**378.120.296**	-	-	**-2.209.742**	**375.910.554**
Change in fair value of a portfolio of financial instruments hedged against interest rate risk		**46.597.287**	-	-	-	**46.597.287**
Tangible assets for own use		**288.343.606**	-	-	-	**288.343.606**
Investment property		**13.727.120**	-	-	-	**13.727.120**
Intangible assets		**18.605.053**	-	-	-	**18.605.053**
Other assets		**11.561.278**	-	-	-	**11.561.278**
TOTAL ASSETS		**45.508.956.283**	-	**-39.876.253**	**-111.959.908**	**45.357.120.123**

LIABILITIES	Ref.	31/12/2017	Reclassification	Change in valuation		01/01/2018
				Impairment	Other	
Deposits at amortised cost – Credit institutions		4.776.023.875	-	-	-	4.776.023.875
Deposits at amortised cost – Customers		31.477.133.430	-	-	-	31.477.133.430
Financial instruments held for trading		202.116.831	11.007.159	-	-	213.123.990
from Hedging derivative financial instruments	H	-	*11.007.159*	-	-	-
Hedging derivative financial instruments		588.498.489	-11.007.159	-	-	577.491.330
to Financial instruments held for trading	H	-	*-11.007.159*	-	-	-
Financial liabilities designated at fair value through profit or loss		146.853.974	-	-	-	146.853.974
Issuance of debt securities		3.713.017.053	-	-	-	3.713.017.053
Provisions		3.594.463	-	14.201.029	-	17.795.492
Other liabilities		35.423.570	-	-	-	35.423.570
Current taxes		62.045.799	-	-	-	62.045.799
Deferred taxes		64.812.580	-	-14.065.501	-29.120.772	21.626.307
Pension fund		199.816.171	-	-	-	199.816.171
Sub-total of LIABILITIES (before equity capital) to be carried forward		41.269.336.235	-	135.528	-29.120.772	41.240.350.992

Description of the different reclassifications

A: This reclassification comprises positions in fixed-income securities that were not actively quoted on a market at the time of their acquisition. Under IAS 39, these positions were classified as loans and advances at amortized cost. Under IFRS 9, these positions are held under a hold-to-collect (HTC) objective and are measured by applying the "Solely Payment of Principal and Interest" ("SPPI") test. The result of this classification is that the measurement is at amortised cost with calculation of a value adjustment.

B: This reclassification comprises positions in fixed-income securities actively quoted on a market at the time of their acquisition and measured at fair value through the revaluation reserve in equity under IAS 39. At the time of the transition to IFRS 9, all "available-for-sale" positions were subject to the SPPI test. The portion transferred corresponds to the positions that underwent the SPPI test and that are now measured at amortised cost under an HTC business model. A value adjustment calculation consistent with IFRS 9 is performed for all these positions.

C: This reclassification comprises positions in fixed-income securities actively quoted on a market at the time of their acquisition and measured at fair value through the revaluation reserve in equity under IAS 39. At the time of the transition to IFRS 9, all "available-for-sale" positions were subject to the SPPI test. The portion transferred corresponds to the positions that did not undergo the SPPI test and that are now measured at fair value through profit or loss. Under IFRS 9, value adjustments are not calculated for these positions.

D: This reclassification comprises positions in fixed-income securities which, after their structure was analysed, were shown to incorporate derivative components that were not closely related, resulting in a

measurement at fair value through profit or loss in accordance with IAS 39. Although these positions are managed under an HTC approach, they do not undergo the SPPI test and continue to be measured at fair value through profit or loss under IFRS 9. The positions in question are not subject to a value adjustment calculation.

E: This reclassification relates to fixed-income securities allocated to the IAS 39 "held-to-maturity" portfolio and measured at amortised cost. Upon implementation of IFRS 9, these positions were classified in the HTC business model and underwent the SPPI test. Following this test, they were fully classified under the new IFRS 9 "Financial Assets Measured at Amortised Cost" heading. Given their SPPI nature, these positions are subject to a value adjustment calculation.

F: This reclassification comprises positions in variable-income securities equivalent to available-for-sale positions according to IAS 39. These are securities held as investments and measured at fair value through the revaluation reserve. Under IFRS 9, the Group elected to continue to measure these positions at fair value through the revaluation reserve. This choice means that gains or losses on disposals are taken into account at the equity level. The positions in question are not subject to a value adjustment calculation.

G: This reclassification comprises positions in variable-income securities equivalent to available-for-sale positions according to IAS 39. These are positions in securities held as fund or ETF units and measured at fair value through the revaluation reserve. Under IFRS 9, these positions, with reference to IAS 32, are not equity instruments and have to undergo the SPPI test. Based on the results of this test, these positions are to be measured at fair value through profit or loss and are recognised as fixed-income securities. The positions in question are not subject to a value adjustment calculation.

H: This reclassification details the treatment of financial assets subject to the SPPI test according to IFRS 9 and qualifying as an accounting micro-hedging relationship under IAS 39. For positions that failed the SPPI test, the hedging relationship is terminated and the derivatives in question are therefore reclassified from "Hedging financial instruments" to "Financial instruments held for trading".

2.2.1.2 *Reconciliation of equity*

The following table details the impact on equity of the transition from IAS 39 to IFRS 9 under equity, following application of the measurement principles and the value adjustment models provided for in IFRS 9.

Impact of FTA on equity	
Revaluation reserve	
At 31 December 2017	**455.873.461**
Reclassification of debt instruments - from available-for-sale to amortised cost	-96.755.076
Reclassification of debt and equity instruments - from available-for-sale to mandatorily measured at fair value through profit or loss	-23.310.159
Impact of deferred taxes	31.228.968
As at 1 January 2018 after FTA	**367.037.194**
Reserves - Undistributed results	
At 31 December 2017	**3.350.713.675**
Change in the valuation of the value adjustment stock	-54.738.764
of which	
Loans and advances at amortised cost – Customers	*-57.380.173*
Loans and advances at amortised cost – Credit institutions	*-1.165.107*
Securities	*4.972.331*
Off-balance sheet commitments	*-14.201.029*
Cancellation of impairment for collective risk	*14.019.048*
Debt and equity instruments - from available-for-sale to mandatorily measured at fair value through profit or loss	8.766.811
Impact of deferred taxes	11.957.307
As at 1 January 2018 after FTA	**3.316.699.029**
Total impact of FTA on equity	**-122.850.913**

2.2.1.3 *Reconciliation of value adjustments under IAS 39 with opening value adjustments under IFRS 9*

The Group provides a comparison of its IAS 39 value adjustment stocks and IFRS 9 valuation adjustment stocks:

Headings	IAS 39 value adjustment stock	IFRS 9 value adjustment stock			
		Level 1	Level 2	Level 3	Total
Loans and receivables at amortised cost	93.085.687	17.535.466	41.434.090	78.944.715	137.914.271
Fixed-income and variable-income securities	20.694.467	7.207.851	172.044	8.362.241	15.742.136
Guarantees and other liabilities	995.111	10.862.265	3.262.743	1.071.132	15.196.140
TOTAL	**114.775.265**	**35.605.583**	**44.868.877**	**88.378.088**	**168.852.547**

The implementation of IFRS 9 thus increases the value adjustment stock from EUR 114,8 million to EUR 168,9 million.

2.2.1.4 Impact of implementing IFRS 9 on solvency ratios

The Group provides details on the impact on its ratios at the end of 2017, taking into account only the implementation of IFRS 9 and excluding any other methodological changes:

Solvency ratios	31/12/2017	01/01/2018	change following the introduction of IFRS 9
Tier 1 solvency ratio	18,33%	17,91%	-0,42%
Total solvency ratio	18,84%	18,41%	-0,43%

2.2.2 IFRS 15 "Revenue from Contracts with Customers"

IFRS 15 "Revenue from Contracts with Customers" came into effect on 1 January 2018 and replaces IAS 18 "Revenue". This standard establishes the principles of revenue recognition and applies to all contracts except contracts relating to financial instruments, leases, and insurance. The basic principle requires revenue to be recognised to the extent that the performance obligations are met. The standard thus indicates that variable revenue is to be recognised only if the reversal of the triggering event is unlikely. This principle could affect the timing of performance-based revenue recognition. After analysing its customer contracts, the Group did not detect any contracts that have a material impact on the application of this standard. Only one associate consolidated using the equity method recognises a non-material impact on the Group's accounts.

2.2.3 IFRS 16 "Leases"

IFRS 16 "Leases" will replace the current IAS 17 of the same name as from 1 January 2019. IFRS 16 mainly introduces a single accounting treatment for leasing.

While the new standard continues to distinguish between operational and financial leases for lessors and does not introduce any accounting changes for lessors, it removes this distinction for leases where the entity is a lessee.

Under IFRS 16, all leases granted will have to be recognised in assets as a "right to use an asset" and in liabilities as a "rental obligation":

- The asset cost includes the initial amount of the rental obligation as well as, where applicable, rent payments already made, initial direct costs and dismantling costs;
- The rental obligation represents the present value of rent payments that have not yet been made.

The Group has identified all leases that are now required to be capitalised under IFRS 16. The leases covered by the new standard are mainly related to buildings, car parks and S-Bank ATMs.

After simulating the impact of a discount on rents based on the "Euro master yield curve 0 coupon", which corresponds to the bank's financing rate (excluding credit spread) and in view of the non-material nature of the discount amount obtained, the Group has opted for capitalisation of undiscounted rents.

The Group estimates the impact of the capitalisation of leases under which the Group is the lessee at approximately EUR 14,4 million.

2.3 <u>Consolidation</u>

2.3.1 Scope of consolidation

The consolidated financial statements comprise the parent company, subsidiaries and entities over which the Bank has control when it has rights to variable returns, because of its relationships with those entities, and the ability to affect those returns through its power over those entities. Subsidiaries are consolidated from their date of acquisition, when the Bank, as the parent company, has the power to direct their financial policies. They are deconsolidated on the date such control ceases.

Consolidation has not generated any goodwill as the subsidiaries have been majority Group-owned since their creation.

Acquisitions are recognised at cost, i.e. the amount of cash or cash equivalents paid representing the fair value, plus all costs directly attributable to the acquisition. All intra-group transactions and unrealised gains on transactions between Group companies are eliminated. Unrealised losses on intra-group transactions are also eliminated unless the cost can be recovered.

If a Group subsidiary or associate accounted for under the equity method applies accounting standards different from those applied to the preparation of consolidated financial statements, appropriate restatements are made to ensure consistency with the Group's accounting policies.

If the reporting date for a company within the consolidated group is different from the Group's reporting date, adjustments are made to take into account transactions made and any other significant events that occurred between this closing date and that of the parent company.

The portion of Group equity attributable to minority interests is given on a separate line. Similarly, the portion of Group earnings attributable to minority interests is also shown on a separate line.

2.3.1.1 Fully consolidated subsidiaries

The consolidated financial statements record the assets, liabilities, income and expenditure of the parent company and its subsidiaries. A subsidiary is an entity over which the parent company exercises control. The parent company controls an entity if it is exposed or has the right to variable income from its interest in the entity and if it has the power to influence the amount of this variable income.

Subsidiaries are fully consolidated as of the date on which the Group took control. They are deconsolidated on the date such control ceases.

The subsidiaries included in the scope of consolidation are as follows:

Subsidiaries	Business	% of voting rights held	
		31/12/2017	31/12/2018
Lux-Fund Advisory S.A.	Investment advice	88,69	89,08
BCEE Asset Management S.A.	UCI management company	90,00	90,00
Bourbon Immobilière S.A.	Real estate	99,90	100,00
Luxembourg State and Savings Bank Trust Company S.A.	Acquisition of shareholdings	100,00	100,00
Spuerkeess Ré S.A.	Reinsurance	100,00	100,00

2.3.1.2 Investments in associates

Associates are companies over which the Group exercises significant influence and are accounted for using the equity method. Significant influence means the Group has the power to direct a company's financial and operating policies in order to obtain a substantial share of the economic benefits. Significant influence is presumed when the Group holds, directly or indirectly through its subsidiaries, 20% or more of the voting rights.

Investments in associates are recognised at cost, and the book value is subsequently adjusted to reflect the investor's share of the net profit or loss of the associate after the acquisition date. The Group's share of the associate's profit or loss is recognised in the income statement.

Equity-method consolidation ceases when the Group no longer has significant influence over the shareholding, unless the Group has incurred legal or constructive obligations to assume or guarantee commitments on behalf of the associate.

The Group's investments in associates:

Associates	Business	% of capital held	
		31/12/2017	31/12/2018
Direct interests			
Société Nationale de Circulation Automobile S.à r.l.	Automotive services	20,00	20,00
Luxair S.A.	Air transport	21,81	21,81
Société de la Bourse de Luxembourg S.A.	Financial services	22,75	22,75
Europay Luxembourg S.C.	Financial services	25,40	30,10
FS-B S.à r.l	Real estate	28,70	-
FS-T S.à r.l	Real estate	28,70	-
LuxHub S.A.	Financial services	-	32,50
Visalux S.C.	Financial services	36,26	34,66
Lalux Group S.A.	Insurance	40,00	40,00
BioTechCube (BTC) Luxembourg S.A.	Investments in biotechnology	50,00	50,00
Indirect interests			
Pecoma International S.A.	Consultation	33,33	33,33
EFA Partners S.A.	Financial services	29,05	29,05

The scope of investments in associates has changed since 31 December 2017. During 2018, the FS-T S.à r.l. and FS-B S.à r.l. positions were sold. The Group's parent company also participated in the formation of LuxHub S.A., whose main activity is to offer services and solutions in the context of the European PSD2 directive.

2.4 Foreign currency transactions

The impact of exchange rate fluctuations on income statement items is detailed below. The Group's functional currency is the euro (EUR).

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the date of the transactions.

Monetary items denominated in foreign currency are translated at the closing rate on each balance sheet date.

Non-monetary items recognised at historical cost denominated in a foreign currency are translated using the exchange rate on the transaction date, while non-monetary items recognised at fair value in a foreign currency are translated at the exchange rates prevailing on the date of fair value measurement.

Foreign exchange gains and losses resulting from monetary assets and liabilities are recognised in the income statement, except where the transaction is classed as a cash flow hedge.

For monetary assets measured at fair value through the revaluation reserve, translation differences resulting from the variance between their fair value on the balance sheet date and their acquisition cost are recognised in the revaluation reserve, whereas translation differences relating to the adjustment of the amortised cost relative to the acquisition value are recognised through profit or loss.

Translation differences relating to adjustments in the fair value of non-monetary items are recognised in the same way as the recognition of these changes in fair value.

The following exchange rates were used for translation of the main currencies in the annual financial statements, where one euro is equal to:

Currency	31/12/2017	31/12/2018
CHF	1,1686	1,1268
GBP	0,8874	0,8985
JPY	134,8300	126,0000
SEK	9,8362	10,2395
USD	1,1984	1,1450

2.5 Accounting judgements and estimates

The Group's parent company applies judgements or estimates in the treatment of:

- classification of financial instruments in the respective portfolios (Section 3.2) and their impairment (Section 3.3.4);
- determination of the fair value of certain financial instruments (Section 3.3.3);
- determination of the SPPI nature of certain financial instruments (Section 3.2.4.3);
- consideration of a current obligation for the recognition of provisions (Section 3.10);
- determination of value adjustments (CVA/DVA) of derivatives (Section 3.3.2.3);
- determination of the effectiveness of a hedging relationship (Section 3.2.2);
- determination of components related to construction-type tangible fixed assets and their expected useful life (Section 3.6);
- actuarial assumptions used in the calculation of the defined-benefit obligation (Section 3.10.3).

3 INFORMATION ON THE BANK'S MAIN ACCOUNTING POLICIES

3.1 Cash and sight accounts with central banks

Treasury consists essentially of "Cash", the nostro accounts with various banks and central banks.

This item also includes the minimum mandatory reserve funded to satisfy the reserve requirement imposed by the BCL. These funds are therefore not available to finance the Group's ordinary operations. The reserve basis is calculated on a monthly basis and is defined according to liability items on the balance sheet, according to Luxembourg accounting principles. The calculation of the basis that determines the reserve requirements is made by the Banque centrale de Luxembourg.

3.2 Classification of financial instruments

The 2018 annual financial statements of the Group's parent company were prepared in accordance with the new IFRS 9. The first-time adoption impact has been reflected in equity. The 2017 financial statements had been prepared and audited in accordance with the standards in force at 31 December 2017, including IAS 39.

For accounting policies referring to IAS 39, please refer to the audited consolidated financial statement as at 31 December 2017. In Section 3.6, the Group's parent company provides a summary of the main categories of financial instruments according to IAS 39.

Nevertheless, the hedge accounting principles are the same for the 2017 and 2018 financial statements, given that the Group has opted to maintain hedge accounting according to IAS 39.

The measurement categories established by IFRS 9 are as follows: financial instruments held for trading, hedging derivatives, financial instruments mandatorily measured at fair value through profit or loss, financial instruments measured at amortised cost and financial instruments measured at fair value through the revaluation reserve.

Off-balance sheet financial instruments include financial guarantees and unused loan commitments in particular. These are recorded in the balance sheet of the Group's parent company as soon as they are disbursed.

3.2.1 Assets and liabilities held for trading

Financial instruments held to make a profit from short-term price fluctuations are classified as assets or liabilities held for trading as appropriate. This category includes certain fixed-income securities, variable-income securities and short sales on these same financial instruments, as well as derivative financial instruments used for trading.

Since the concept of short-term is not defined by IFRS, the Group considers six months as the average duration for non-derivative financial instruments.

Financial Instruments held for trading are initially designated at fair value, with any subsequent gains and losses arising from changes in fair value recognised in the income statement under "Income from financial instruments held for trading". Accrued interest incurred and received is recognised in the income statement under "Interest income", and dividends are recognised under "Income from variable-income securities" from the time the right to payment becomes established.

3.2.2 Derivative financial instruments used for hedging purposes

The Group decided to continue to apply the hedging principles according to IAS 39 and therefore does not apply IFRS 9 in this regard. It thus uses derivative financial instruments to hedge interest rate, foreign exchange, credit and price risk such as stock market indices or share prices. The derivatives commonly used are interest rate swaps (IRS) and cross-currency interest rate swaps (CIRS) in standard plain vanilla hedging transactions. In addition to these standardised contracts, the Group uses swaps with structured components to specifically hedge structured Euro Medium Term Notes (EMTN) issues and acquisitions of structured bonds included in the portfolio of fixed-income securities recognised at amortised cost and containing embedded derivatives. Only structures that are closely related are hedged in this way.

Derivatives are considered as being held for trading except where they are designated as hedging instruments. When entering into a contract, the Group may designate derivative financial instruments as hedging instruments in assets or liabilities on the balance sheet, if the transactions meet the criteria set out in IAS 39.

The Group classifies hedging instruments in the following categories:

- fair value hedge of an asset, a liability or a firm commitment;
- fair value hedge of a portfolio or a sub-portfolio of assets;
- cash flow hedge of future cash flows attributable to a specific asset or liability or future transaction.

The Group primarily uses fair value hedges and, secondarily, cash flow hedges.

Hedge accounting must comply with the following restrictive conditions set out in IAS 39:

- Prior to being set up, the hedging relationship is formally designated and documented, including the entity's risk management objective and strategy for undertaking the hedge, identification of the hedging instrument, the hedged item, the nature of the risk being hedged, and how the entity will assess the hedging instrument's effectiveness;
- The hedging starts with the designation of the derivative instrument used for hedging and ends either at the derecognition of the hedged instrument or if the effectiveness of the hedge is no longer given;
- Prospective effectiveness: as soon as the transaction is set up, it is expected to be highly effective in offsetting changes in fair value or cash flows attributable to the hedged risk during the hedging period. Prospective effectiveness is established when the main characteristics between hedged items and hedging items are substantially identical (par value, interest rate, maturity and currency) within the hedging period designated by the Group for the transaction;
- Retrospective effectiveness: effectiveness is assessed retrospectively (results within a range of 80% to 125%) at each reporting date.

Changes in the fair value of derivatives designated as fair value hedges which meet the criteria for hedge accounting and have demonstrated their effectiveness relative to the hedged instrument are recognised in profit or loss under "Income from hedging transactions". At the same time, corresponding changes in the fair value of the hedged item are also recognised in profit or loss.

If the hedge no longer meets the criteria for hedge accounting at a given time, the fair value adjustment to the interest-bearing hedged item must be amortised to profit or loss over the remaining period to maturity as an adjustment to the return on the hedged item.

The ineffectiveness of the hedge is mainly due to:

- the difference in the timing of cash flows;
- the difference on the yield curve;
- the effect of the change in credit risk.

Changes in the fair value of derivatives designated as cash flow hedges, which meet the criteria for hedge accounting and have proven their effectiveness relative to the underlying instrument to be hedged, are recognised in equity under "Revaluation reserve – cash flow hedges".

If a hedging instrument expires or is sold, terminated, or exercised, or if the hedge no longer meets the hedge accounting criteria, the Group ceases to apply hedge accounting. Any adjustment in the book value of an interest-bearing hedged instrument is amortised through profit or loss and must be totally amortised at maturity. If the item is derecognised, i.e. removed from the balance sheet, the change in fair value is recognised immediately in profit or loss.

The Group's parent company applies fair value macro-hedging on fixed-rate loans in accordance with the principles of IAS 39 in its "carve-out" version for the European Union. The decrease in the interest-rate curve favoured the marketing of fixed-rate loans, primarily in the area of mortgage loans. Hedging is done exclusively using IRS derivative financial instruments.

3.2.3 Variable-income securities

For variable-income securities meeting the definition of equity instruments, the Group's parent company has opted for fair value measurement through the revaluation reserve with the recognition of dividends in the income statement and income on sales in a dedicated equity category, without reclassification through profit or loss. The item "Investments in associates accounted for using the equity method" is also subject to this valuation principle. The choice made by the Group's parent company was based on this classification in order to maintain continuity of methods in relation to IAS 39.

Variable-income securities that do not constitute equity are not eligible for fair value measurement through the revaluation reserve and are therefore classified in the portfolio of financial assets mandatorily measured at fair value through profit or loss.

3.2.4 Fixed-income financial instruments

The classification of other fixed-income financial instruments is based on the business model and the SPPI test as described below.

3.2.4.1 Business models

The core business model of the Group's parent company provides for the holding of assets to maturity, regardless of the product:

- In principle, acquired fixed-income securities are held to maturity. IFRS 9 introduces the notion of the business model, which, for the bond portfolio held by the Group, is defined by the management method according to the criteria of the holding period of the securities and the type of income generated, i.e., interest income or income on sale. Combined with the SPPI ("solely payments of

principal and interest") test, which deals with coupon calculation and principal repayment, three types of portfolios are defined:

- **HTC** ("**Hold to collect**") portfolio: The bond portfolio is eligible for the HTC classification, provided that it is held for the long term in order to collect cash flows based on coupons due and repayment of principal. According to IFRS 9, sales are permitted in the following cases: (i) the impact is non-material, (ii) the impact is material and sales should therefore be infrequent, (iii) they are made as the instrument approaches maturity and (iv) they are related to exceptional circumstances such as a significant deterioration in the credit quality of the counterparty or legal or tax changes.

  HTC portfolio bond positions that pass the SPPI test are classified in the portfolio of financial assets measured at amortised cost and are included in the balance sheet item "fixed-income securities measured at amortised cost".

- **HTCS ("Hold to collect and sell")** portfolio: This involves a long-term holding of securities but with the possibility of selling depending on the opportunities for realising capital gains.

  Unlike the HTC portfolio, which is limited to a longer-term holding, the HTCS portfolio is based on management objectives. This portfolio consists of securities that meet the SPPI criteria but do not meet all the criteria defined for the HTC portfolio, provided that they are not considered as trading positions.

  In 2018, this business model was not used by the Group. Bond positions in the HTCS portfolio that pass the SPPI test should be classified in the portfolio of financial assets measured at fair value through the revaluation reserve.

- **FVTPL ("Fair value through profit or loss")** with revaluation at fair value through profit or loss. For this business model, two different cases can occur:

  a. Positions in the trading book are part of this portfolio. IFRS 9 defines trading as the intention to buy and sell securities for the purpose of realising a profit in the short term. These are securities generally held for less than 6 months. These instruments are included in the balance sheet category "financial instruments held for trading" without undergoing the SPPI test as explained in Section 3.2.1;

  b. This portfolio also includes positions in financial instruments held for the long term that do not undergo the SPPI test and must therefore be measured through profit or loss. Bond positions in the FVTPL portfolio that are not held for trading and do not pass the SPPI test

are classified under the balance sheet item "Financial assets mandatorily measured at fair value through profit or loss".

- Loans granted by the Group are not intended for a subsequent sale or a securitisation transaction but are retained on the asset side of the balance sheet until final repayment. The Group's parent company does not acquire loan portfolios already active.

The "lending" activity of the Group is therefore assigned to the HTC business model and is based on contractual data and on the principle that loans are granted and held for the purpose of collecting principal and interest until maturity.

Loans granted by the Group and passing the SPPI test are classified in the portfolio of financial assets measured at amortised cost and presented separately in the financial statements of the Group's parent company under "Loans and advances at amortised cost".

However, loans granted by the Group that do not pass the SPPI test are classified in the portfolio of financial assets mandatorily measured at fair value through profit or loss and presented globally in the balance sheet under the heading "financial assets mandatorily measured at fair value through profit or loss".

3.2.4.2 Monitoring of business model compliance

The thresholds for questioning the business model put in place by the Group's parent company disregard sales and capital gains realised on positions with a residual maturity of 6 months or less.

The threshold for impact has been set at 5% of net banking income (NBI). The NBI considered is that of the previous financial year. If this threshold is exceeded, and if more than 10% of the outstanding amounts of a portfolio are sold per year, then the portfolio no longer meets the conditions of eligibility for the HTC classification with a measurement at amortised cost.

If the two cumulative thresholds are exceeded, this will launch a procedure to notify the Risk Subcommittee. These thresholds will be monitored on a monthly basis.

Beyond these thresholds, the Group's parent company has defined alert thresholds taking into account historical observations from 2013 to 2016, with the aim of anticipating the achievement of absolute thresholds:

- a number of 50 transactions;
- a cumulative nominal value of 2%;
- an NBI impact of 3%.

If any one of these thresholds is exceeded, the Risk Subcommittee will be notified, followed by a documented deliberation.

In terms of granting or managing loans, any modification of the existing business model as well as any definition of an additional business model must go through the various levels of governance, which are the ALM/Risks subcommittees, the ALM and Risk Management Committees, the Executive Committee, the Audit and Risk Committees at the Board of Directors level, and the Board of Directors itself.

3.2.4.3 SPPI test

In order to undergo the SPPI test, financial instruments in the form of fixed-income securities must include only structures:

- considered non-speculative and/or unleveraged;
- whose return in the form of interest respects the time value of money;
- guaranteeing the payment of interest and repayment of the principal.

The Group has reviewed all its financial instruments in the form of fixed-income securities and has implemented a classification in SPPI-compliant securities and non-SPPI-compliant securities through the introduction of a "deal type". This qualitative information is included in the information systems of the Group's parent company and is subject to specific control procedures. When a bond can be assigned more than one deal type, a quantitative analysis is performed to measure the degree of leverage of the instrument compared with a fixed-rate instrument over the same period to determine the final deal type to be applied.

For loans, the SPPI test is based on the following two principles:

- The repayment of principal and interest must be contractually ensured. In principle, this criterion is always met as long as the loans do not contain any embedded derivatives that significantly alter cash flows other than caps/floors or significant early redemption penalties.
- The return must be based on the time value of money plus a margin that offsets the credit risk. This criterion implies that there is no leverage.

For SPPI tests on loans, the Group distinguishes two major categories, namely standard loans contracted on the basis of a model contract and "customised" loans involving special conditions and other obligations to be respected by the borrower.

The contracts on which all standard loans are based are subject to a prior compatibility review of their conditions with the SPPI criterion. A contract-by-contract review is not carried out for this type of contract. The contract data for each new loan type belonging to this loan category are subjected to a SPPI test on the basis of a list of specific pre-marketing criteria.

The contracts on which customised loans are based are reviewed individually to determine compliance with the SPPI criterion in accordance with the internal procedures including the criteria of the standard.

3.2.5 Financial liabilities designated at fair value through profit or loss

Financial liabilities designated at fair value through profit or loss include instruments with structures that are not closely related but are hedged economically with derivatives. With this designation for the financial liability, the Group offsets the impact of the accounting mismatch with the derivative financial instrument. Derivative financial instruments used for that purpose are exclusively IRS or CIRS instruments. The fair values are simply offset at the Group's profit or loss level under "Income from financial instruments held for trading" and "Income from financial instruments designated at fair value through profit or loss".

3.2.6 Other financial assets and liabilities

Other assets comprise short-term receivables. Other liabilities mainly consist of short-term payables, coupons due and other amounts payable on behalf of third parties, debts to preferential and sundry creditors.

3.2.7 Income and expenses relative to financial assets and liabilities

Interest income and expenses are recognised in profit or loss for all financial instruments measured at amortised cost, according to the effective interest rate method.

The effective interest rate is the rate that exactly discounts future cash disbursements or receipts over the expected life of the financial instrument in order to obtain the net book value of the financial asset or liability. The calculation includes transaction costs and income, premiums and discounts. Transaction costs and income that are an integral part of the contract's effective rate, such as loan administration fees for instance, can be treated as additional interest.

Financial instruments held for trading are recorded at their fair value. Changes in their fair value are recognised in the income statement under "Income from financial instruments held for trading". Similarly, financial instruments designated at fair value through profit or loss are recorded at fair value, and changes in fair value are recognised in profit or loss under "Income from financial instruments designated at fair value through profit or loss".

Dividends are entered under "Income from variable-income securities", while interest is entered under "Interest income".

The Group recognises fees that are not included in the calculation of the effective interest rate in accordance with IFRS 15, i.e. when the performance obligation is realised depending on whether it is realised at a given time or gradually. This mainly concerns the following fees:

- Fees related to performance obligations fulfilled gradually, which are therefore spread over the corresponding period;
- Fees related to service obligations fulfilled at a given time and therefore recognised in the income statement when the service is performed.

Note that the entry into force of IFRS 15 on 1 January 2018 did not have any impact on how this type of income is recognised for the Group's parent company.

For certain operations relating to wholesale international customers, commitment and utilisation fees are determined based on a percentage of the credit line. These fees are integrated on a "prorata temporis" base over the life of the credit line, except if the fees should be integrated in the acquisition cost of the balance sheet exposure which may result from the credit line.

3.2.8 Netting financial assets and financial liabilities

For the netting of certain positions relating to repurchase and reverse repurchase agreements, the existence of a Global Master Repurchase Agreement (GMRA) is not a sufficient condition. The balance sheet netting of these agreements takes place only if the counterparties have agreed in advance and if the transactions meet the same maturity date and liquidation and payment system criteria.

3.3 Banking transactions

3.3.1 Initial valuation

Purchases and sales of financial assets and liabilities whose delivery or settlement are made after the transaction date are recognised on the balance sheet on the delivery and settlement date respectively.

All financial instruments are recognised at fair value when initially recognised, increased by directly attributable costs when the financial instruments are not entered at fair value through profit or loss. This initial fair value generally corresponds to the transaction price.

Transactions in financial instruments of assets and liabilities in the form of securities are recognised on the off-balance-sheet transaction date and on the balance sheet value date.

Financial derivatives are recognised on the balance sheet at their fair value date on the transaction date. The classification of derivative financial instruments on initial recognition depends on their

characteristics and purpose. Therefore, they may be classified as "financial instruments held for trading" or as "hedging instruments".

Derivative financial instruments are recognised in assets when the fair value is positive, and in liabilities when it is negative. Fair value here means the "dirty price" of the instruments, i.e., including the accrued interest.

Derivative financial instruments embedded in financial instruments are separated from the host contract and accounted for at fair value if the economic risks and characteristics of the embedded derivative are not closely related to those of the host contract, and the entire instrument is not classed as held for trading or has not been designated as measured at fair value in the income statement. Embedded derivative financial instruments that have been separated from their host contract are recognised at fair value in the trading portfolio and changes in fair value are recognised in the income statement.

Gains or losses on the sale of financial assets that are not subject to revaluation through the income statement are calculated as the difference between the amount received net of transaction costs and the acquisition cost and amortised cost of the financial asset.

3.3.2 Subsequent measurement

The valuation methods are as follows: historical cost, amortised cost or fair value.

3.3.2.1 Historical cost

Financial assets and liabilities recognised at historical cost are valued at the initial recognition amount.

3.3.2.2 Amortised cost

The amortised cost corresponds to the amount initially recognised, net of repayments of capital, adjusted for premiums and discounts, calculated as the difference between the initial amount and the repayment amount on maturity, over the life of the asset, less impairment recognised through value adjustments.

3.3.2.3 Fair value

The fair value of the counterpart received or tendered can usually be determined by reference to an active market or by using valuation techniques based chiefly on observable market inputs.

To determine a consistent value for the financial instruments measured at fair value, the Group uses the following methods:

- derivative financial instruments held for trading or hedging: the Group uses the discounted cash flow (DCF) method for plain vanilla contracts and the Black & Scholes model for structured contracts. In addition to these fair value measurements, the Group calculates, after application of ISDA-CSA agreements, an adjustment for counterparty risk, or a "Credit Value Adjustment" (CVA), to account for the credit quality of the counterparty for derivative financial instruments recognised on the assets side of the balance sheet, and a Bank-specific adjustment for credit risk, or a "Debit Value Adjustment" (DVA), for derivative financial instruments recognised on the liabilities side of the balance sheet.

- financial assets:
  - fixed-income securities:
    - for assets quoted on an active market, the bid price published by an official quotation agent is used;
    - for assets quoted on a market considered inactive, the valuation price is calculated by the Bank's internal valuation model.

  - variable-income securities:
    - for assets quoted on an active market, the bid price published by an official quotation agent is used,
    - for unquoted respectively quoted securities listed on an inactive market, determination by the Bank of a measurement value according to a procedure detailed below in Section 3.3.3 "Valuation techniques for determining fair value and fair value hierarchy".

- financial liabilities:
  - EMTNs issued by the Group's parent company are classified at amortised cost. These transactions are designated as fair value hedges to avoid an accounting missmatch on the income statement due to hedging these issues with derivative financial instruments. Thus, the fair value measurement method applied to the issue and the measurement of its hedge are identical, namely the discounted cash flow and Black & Scholes method.

3.3.3 Valuation techniques for determining fair value and fair value hierarchy

When the fair value of a financial instrument recognised in the balance sheet cannot be determined based on an active market, it is calculated using valuation techniques mostly based on mathematical models. Insofar as possible, the inputs to mathematical models come from market observations.

The Group uses valuation techniques based on observable and non-observable market data to determine fair value:

- observable data reflect market variations collected from independent sources and reflecting real transactions (e.g. a three-year swap rate);
- non-observable data reflect estimates and internal assumptions adopted by the Bank relating to market variations, e.g. an estimation of the payment plan of an Mortgaged-backed Securities (MBS).

A fair value hierarchy was established according to the type of observable and non-observable data:

- <u>Level 1 fair value</u>: Level 1 inputs are essentially quoted prices in active markets for identical financial instruments. This level includes equity securities and debt instruments listed on stock exchanges, as well as derivative financial instruments traded on a regulated market. Financial instruments not listed on a market but that were recently involved in a transaction are also included in Level 1.
- <u>Level 2 fair value</u>: Level 2 inputs are inputs other than quoted market prices included within Level 1 that are observable for the financial instruments, either directly or indirectly, i.e. derived from observable prices, such as implied volatilities of a share derived from observable prices of option contracts on this share. This level includes the majority of over-the-counter derivative financial instruments and structured debt securities issued. These inputs, such as "EURIBOR" yield curves or credit spreads, are initially provided by specialised financial data providers.
- <u>Level 3 fair value</u>: This level includes equity instruments or debt securities for which significant parameters used in the valuation models are based on internal estimations and assumptions. The shareholdings of the Group's parent company in non-material unlisted companies are valued on the basis of net assets after taking into account the dividend for the current year, and material holdings are measured as follows:
    - In the event of a transaction (capital increase or sale transaction) during the last six months or if the parties to a future transaction agree on the price of the transaction, this transaction price constitutes the basis for the measurement value of the position, taking into consideration a discount, provided that the shareholding is deemed strategic for the Group's parent company and that no paragovernmental shareholders, such as the Bank, participate in the transaction;
    - For the six months following a transaction, the price of the last transaction remains an important reference but does not exclusively determine the valuation price;

- The price of the historical transaction is adjusted in relation to a number of stock market ratios established on the basis of a peer group consisting of a sample of listed companies with a commercial and/or industrial activity comparable with the unlisted company, valued by the Group's parent company;
- Since the last transaction is more than two years old, only a valuation based on the market ratios of this peer group allows the value of the position held by the Group's parent company to be determined. A discount to the valuation of unlisted assets may be applied;
- The following ratios are documented for the unlisted company, owned by the Group's parent company and for all listed companies of the peer group:
  - Enterprise Value to EBITDA (except insurance companies);
  - Price-to-Book, Price-to-Sales and Price-to-Earnings;
  - ratios supplemented by information on business growth prospects, operating margins, return on equity (ROE), debt and credit quality;
  - The data used are derived from the company accounts. The peer group's multiples derived from the stock market ratios and the accounting data of the companies making up each peer group are taken from Bloomberg with reference to the closing prices on the valuation day, i.e. 30 June or 31 December of the respective year;
  - To supplement this valuation with market multiples, the Group's parent company may use multiples based on recent transactions in companies with the same characteristics as the unlisted company, held by the Bank.

A change in level may occur in the event that market characteristics change.

To determine this hierarchy of fair values, the Group reviewed all financial instruments measured at fair value to assess the importance of observable data directly or indirectly on the markets. Observable market data include:

- credit spread curves based on Credit default swaps' (CDS) prices;
- interbank interest rates or swap rate;
- foreign exchange rates;
- stock indices;
- counterparty credit spreads.

3.3.4 Impairment of financial assets

In accordance with the second phase of IFRS 9, the Group considers all HTC model products meeting the SPPI criterion as well as guarantees and certain commitments recognised off the balance sheet in the calculation of impairment of financial assets.

These exposures are classified according to three "stages" determining the calculation of the value adjustments:

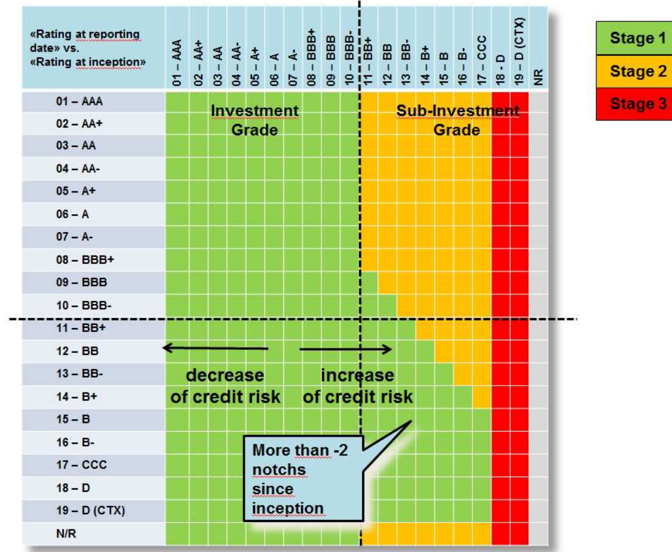
- "stage 1" includes exposures whose credit risk has remained unchanged or has not deteriorated significantly since the loan was granted or the security was purchased ("at inception").
  ⇨ Value adjustment = Expected Credit Loss at 1 year

- "stage 2" includes financial instruments whose credit risk has increased significantly since the loan was granted or the security was purchased, i.e., exposures that:
  - have had their internal rating downgraded by ≥ 3 notches "since initial recognition" and have a "sub-investment grade" rating as at the reporting date;
  - are "Past Due" for 30 consecutive days on a contractual loan repayment due date or a sight account overdraft;
  - are "non-performing" but not in default according to the CRR definition;
  - have been restructured according to the definition established by the European Banking Authority (EBA).

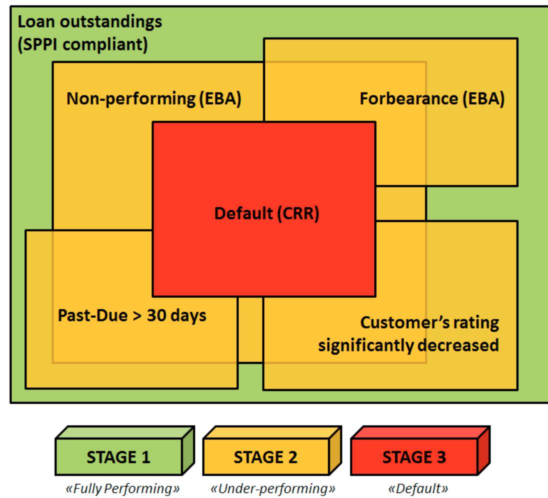
  ⇨ Value adjustment = "Lifetime Expected Credit Loss"

- "stage 3" includes the outstanding amounts in default according to the CRR definition. The impacts of the new standard on the value adjustments of outstandings classified in "stage 3" are not as great as those on value adjustments of outstandings classified in "stage 1" or "stage 2". The calculation of value adjustments applied in accordance with IAS 39 already takes into account losses resulting from future flows re-estimated following the entry into default of an exposure.
  ⇨ Value adjustment = "Lifetime Expected Credit Loss" (with probability of default = 1)

Assignment matrix for initial "stages" and migration in case of a significant increase in credit risk:



The chart and the table below detail the consideration of the notions of the EBA in the various "stages":



Contagion and probationary period: The Group applies contagion for all defaults. All the commitments of a customer in default are therefore found in "stage 3". Contagion is not applied for "stages 1 and 2".

The table below gives information about the probationary periods:

Notions	Explanations	IFRS9 stage
1. "Default"	. No payment arrears, but "unlikeliness to pay", in the sense of a serious doubt about the future ability to meet the commitments (e.g. bankruptcy) . Late > 1 monthly instalment for > 90 days, or . Overdraft > 500,- EUR for 90 days	STAGE 3
2. "Non-Performing"	. Late > 1/2 monthly instalment for > 90 days, or . Overdraft > 100,- EUR for 90 days, or . Qualitative criteria (e.g. recent balance sheet missing or publication of disappointing earnings)	STAGE 2
3. "Forbearance /renegotiated due to significant increase in the credit risk" (IFRS 9 B.5.5.27)	. Restructuring measures granted to the customer during the term of the contract (deferment, extension of due date, rate reduction) <u>and</u> customer in financial difficulty (proxy: internal rating)	STAGE 2
4. "Past-Due"	. Late payment > 30 days with certain materiality thresholds (EBA notion)	STAGE 2
5. Internal rating	. Downgrading of internal rating to sub-investment grade (below BBB-)	STAGE 2

Concepts	probationary period	conditions
Forbearance	2 years	- amount repaid > 6 monthly instalments or > EUR 600 for loans with a monthly instalment ≤ EUR 100; - past-due not triggered during this period - rating of at least investment grade - performing
Non-performing	immediate	if the loan is no longer non-performing and the forbearance start date ≥ 1 year
Stage 2 to Stage 1	at least 2 years	if Stage 2 with forbearance;
	6 months	if the account exits default, it returns directly to Stage 2 but, due to the variables considered in the Retail rating, the rating will continue to be penalised for 6 months following the exit from default;
	Immediate	if Stage 2 without forbearance
Stage 3 to Stage 2	Immediate	End of the event of default, such as significant past-due payments

The rules on probationary periods do not provide for direct transfers from stage 3 to stage 1.

Determination of "Expected Credit Loss": for each "stage", the calculation method used is different:

Stage	Description	Formula	Explanation
1	Expected loss is calculated over a period of up to one year	$ECL = PD_{M,1} . LGD1. Exposures (t_0)$	- $PD_{M,1} = 1-(1-PD_1)^M$ and M the residual maturity in number of days/365,25 of the next year, - PD_1 = Probability of default for the first year, which takes into account the actual residual duration (Daily granularity), - LGD_1 = Loss given default during the next year, - Exposure (t0) = Exposure at the beginning of the period
2	The expected loss is to be estimated over the entire remaining life of the contract (lifetime expected loss)	$ECL = \sum_{k=1}^{n} ECL_k = \sum_{k=1}^{n} PD_{M,k} \cdot \frac{(Exposition_{k-1} \cdot LGD_k)}{(1+i)^{k-1}}$	$PD_{M,k}$ takes into account the actual residual duration (Daily granularity). ECL is the sum of expected losses per year, discounted at the respective contractual rate i. The variable n represents the remaining duration of the exposure expressed in years.
3	The probability of default is 100% for these exposures; the expected loss is therefore a function of the current exposure and the loss rate (LGD), which takes into account the re-estimated future flows	$ECL = 100\% . LGD1 .Exposures (t_0)$	- LGD1 = Loss given default during the next year, - Exposure(t0) = Exposure at the beginning of the period

The basic principles applied by the Group are given in the previous table, and the PD and LGD risk parameters are derived from the "through the cycle" (TTC) parameters used for the calculation of capital requirements. To take into account the point-in-time (PIT) and forward-looking aspects, the Group has applied a PIT index allowing the TTC parameters to be transformed into PIT parameters and the parameters to be projected by considering three economic scenarios: baseline, adverse, and optimistic.

The probabilities of default (PD) are determined using a projection of the PIT Index on the basis of a function by exposure class or a table based on an appraiser assessment. The projection of the PIT Index therefore depends on the projection of macroeconomic variables, which are based on a simulated macroeconomic scenario.

To assess the lifetime value adjustment of a product, a conditional PD is determined, representing the probability that an exposure will fall into default in year k of the remaining n years.

The parameter of the "Loss Given Default" (LGD) is determined from a decision tree, based on the characteristics of the different products. The Group uses a PIT approach.

The Group uses three scenarios: a baseline scenario, weighted at 60% and calibrated on the basis of IMF forecasts for the national portfolio and OECD forecasts for the international portfolio, an optimistic scenario and an adverse scenario, weighted at 20% each. The optimistic and adverse scenarios were derived on the basis of historical scenarios reflecting growth and crisis phases at a horizon of five years for the national market and three years for the international market.

The results are reviewed and validated by the appropriate bodies.

The changes in GDP and inflation taken into consideration under the three scenarios are based on the following tables:

- For Luxembourg:

Year	Estimation of GDP scenarios			Estimation of inflation scenarios		
	Baseline	Adverse	Optimistic	Baseline	Adverse	Optimistic
2018	3,70%	3,70%	3,70%	1,30%	1,30%	1,30%
2019	3,50%	-0,58%	4,62%	1,40%	0,14%	1,89%
2020	3,30%	-1,98%	4,37%	1,70%	0,87%	2,11%
2021	3,10%	2,14%	5,09%	1,90%	1,30%	2,26%
2022	3,10%	0,86%	5,67%	2,00%	1,02%	2,00%
2023	3,00%	2,79%	6,24%	2,00%	0,66%	2,93%

- For OECD countries:

Year	Estimation of GDP scenarios			Estimation of inflation scenarios		
	Baseline	Adverse	Optimistic	Baseline	Adverse	Optimistic
2018	2,28%	0,15%	3,06%	2,17%	0,25%	2,03%
2019	2,28%	-2,52%	2,66%	2,17%	0,92%	2,06%
2020	2,28%	2,20%	2,92%	2,17%	1,43%	1,95%
2021	2,28%	1,40%	2,50%	2,17%	1,12%	2,87%

The amounts of allocations to and reversals of value adjustments are determined in accordance with the methodology described above.

3.3.4.1 Write-off of receivables measured at amortised cost

Only value adjustments recorded for stage 3 assets can be the subject of a write-off of receivables.

The decision to write off a receivable is made by the parent company's Executive Committee based on its assessment that the probability of recovering such a debt is near zero.

If appropriate, the entirety of the targeted asset is written off.

3.4 <u>Repurchase and reverse repurchase agreements – Lending and borrowing of securities</u>

3.4.1 Repurchases and reverse repurchases

Securities subject to a sale agreement with a repurchase commitment (sale/buyback transactions) for the same or substantially identical asset remain on the balance sheet. The amount owed to the counterparty is entered in liabilities under "Deposits at amortised cost".

In the main, the Group enters into firm repurchase agreements relating to the same or substantially identical assets.

By analogy, securities purchased subject to resale agreements (reverse repo) relating to the same or substantially identical asset are not recorded in the balance sheet. The consideration for securities purchased under reverse repo agreements is entered under "Loans and advances at amortised cost". This type of instrument is part of an HTC business model and respects the characteristics of the SPPI test.

The Group carries out tri-party repo and tri-party reverse repo transactions with counterparties rated "A" or higher. The structure involves a third-party intermediary throughout the life of the tri-party repo to manage delivery versus payment, control the eligibility criteria of securities, calculate and manage margin calls and manage substitutions of securities. Maturity varies from overnight to 12 months.

Income and expenses from repurchase and reverse repurchase agreements are entered under "Interest income" in the income statement.

3.4.2 Lending and borrowing of securities

Securities lent remain on the balance sheet, while securities borrowed are not entered on the balance sheet.

3.5 <u>Interbank market</u>

3.5.1 Borrowings

Borrowings are initially recognised at fair value net of transaction costs. Subsequently, borrowings are recognised at amortised cost and any difference between the net amount received and the amount repaid is recorded in the income statement over the duration of the loan, using the effective interest rate method.

3.5.2 Issuance of debt securities

Debt issued by the Group is classified at amortised cost. However, as part of its EMTN programmes, the Group issues a large number of structured bonds containing embedded derivative financial instruments whose price fluctuations are hedged by swaps with a structure identical to that of the swap contained in the bond.

The Group has designated closely related transactions as fair value hedge relationships. This allows it to offset the impact of changes in market prices at the income statement level.

For transactions that are not closely related, the Group applies the fair value option by including them under "Financial liabilities designated at fair value through profit or loss". As the heading indicates, they are measured at fair value through profit of loss. Own credit risk is recorded in the income statement, given its non-materiality.

3.6 Financial instruments according to IAS 39

The comprehensive accounting principles related to IAS 39 are included in the 2017 consolidated financial statements available on the website of the Group's parent company. They were the basis for the figures reported for the year ended 31 December 2017.

Similar categories between IAS 39 and IFRS 9, namely assets and liabilities held for trading, derivative financial instruments used for hedging and financial liabilities designated at fair value through profit or loss (refer to Section 3.2 for these) are excluded from this reminder.

Under IAS 39, the various categories of financial instruments can be summarised as follows. :

3.6.1 Fixed-income securities held to maturity

Securities with a fixed maturity that are actively quoted at the acquisition date and that the Group expressly intends and has the means to hold to maturity are recognised at amortised cost using the effective interest rate method integrating premiums and discounts spread over the life of the asset, after deducting any impairment.

3.6.2 Financial assets designated at fair value through profit or loss

The Group designates as financial instruments measured at fair value through profit or loss any financial assets with structures that are not closely related and therefore not initially eligible for measurement at fair value through the revaluation reserve, but that are hedged economically with derivative financial instruments.

3.6.3 Loans and advances at amortised cost

Loans and advances measured at amortised cost are defined as financial assets incorporating fixed or adjustable payments and which are not listed on an active market. Loans and advances with fixed maturity are recognised at amortised cost using the effective interest rate method.

3.6.4 Available-for-sale assets

Available-for-sale assets correspond to positions initially designated as such, or those that were not classified in one of the other financial asset categories at the time of initial recognition.

These financial instruments are recognised at fair value through the revaluation reserve.

3.6.5 Impairment of financial assets

The Group recognises impairment on a financial asset that is not measured at fair value through profit or loss when there is objective evidence of impairment of that asset.

Impairment can be broken down into two categories:

Impairments recognised by individual value adjustments: the amount of the impairment loss is the difference between the book value of the asset and its recoverable amount on the basis of objective evidence of probable losses.

Impairments recognised by collective value adjustments: in the absence of any individual value adjustments, the establishment of collective value adjustments to take account of the progressive credit risk after the loan grant date and without objective evidence of probable losses.

3.7 Tangible assets

Tangible assets for own use as well as investment property are recorded at acquisition cost. Costs related directly to the acquisition are capitalised as an integral part of the acquisition cost.

Tangible assets for own use consist of land and buildings, facilities and installations, computer hardware and other equipment. The heading "Investment property" in IAS 40 includes the Group's rented property.

Tangible assets are recognised at historical cost less accumulated amortisation and possible impairment. Costs related directly to the acquisition are capitalised and amortised as an integral part of the acquisition cost at the same pace as for the principal asset. The amortisable amount of these assets is calculated after deduction of their residual value. The Group applies the component approach to depreciation according to IAS 16 on tangible construction assets. Components related to tangible assets are amortised over their estimated useful life using the straight-line method. Land is recognised at cost.

Useful life for the main types of tangible assets:

- buildings:	
- Structural works components	30 – 50 years
- Finishing component 1	30 years
- Finishing component 2	10 years
- Other components	10 – 20 years
- computer hardware:	4 years
- office fixtures, furniture and other equipment:	2 to 10 years
- vehicles:	4 years

Finishing component 1 includes, among other things, lightweight partitions, screeds, tiles and joinery, whereas finishing component 2 includes resilient floor coverings and paint. "Other" consists of, among others, electrical facilities, plumbing, and heating and air-conditioning facilities.

Investments on leased buildings are amortised over the remaining term of the lease. If the term is not fixed, amortisation takes place over 10 years.

Maintenance and repairs that do not increase the economic benefits of the tangible asset are accounted for in the income statement when incurred.

If the recoverable amount of an asset falls below its book value, an impairment must be recognised to adjust the book value on the balance sheet to the estimated recoverable amount.

Expenses incurred for the purpose of increasing the economic benefits generated by a tangible asset or real estate asset, or which extend its useful life, are recognised in assets on the balance sheet and amortised over the underlying asset's estimated useful life.

Gains or losses arising from the removal from active use or disposal of tangible assets are determined by the difference between the proceeds of the disposal and the residual value of the assets and are recognised in profit or loss under "Profit from non-current assets and disposal groups classified as held for sale and not qualifying as discontinued operations" as at the date of disposal or removal from active use.

The acquisition cost of equipment and furniture whose normal useful life is less than one year is recognised directly in profit or loss for the period under "Other general and administrative expenses".

3.8 Intangible assets

The Group considers software, whether acquired or internally generated, as well as the related development and set-up expenses, as intangible assets. Software is amortised over a 3-year period using the straight-line method.

3.9 Lease agreements

Where a lessor assigns to a lessee the right to use an asset for a specified period under an agreement in exchange for payment(s), that agreement is considered a lease.

A lease agreement that transfers substantially all the risks and advantages incidental to ownership of an asset is a finance lease, otherwise it is an operating lease.

3.9.1 A Group entity is a lessee

The Group has essentially entered into operating lease agreements for the rental of its offices or equipment. Lease payments are recognised in the income statement and when a lease contract is terminated in advance, the penalties to be paid are recognised as an expense in the reporting period during which the termination occurred.

3.9.2 A Group entity is a lessor

When the Group leases an asset within the framework of a finance lease, the net present value of the lease payments is recognised as a receivable under "Loans and advances at amortised cost" for customers or credit institutions respectively. The difference between the payments due and their present value is recognised as unrealised financial income under "Interest income" in the income statement. The lease payments and the arrangement costs for the lease are spread over the term of the agreement so that the income generates a constant effective interest rate.

3.10 Employee benefits

Employee benefits are measured in accordance with IAS 19. The benefits granted to employees by the Group are divided into the three categories described hereafter.

3.10.1 Short-term benefits

Short-term benefits mainly comprise wages, annual holidays and bonuses paid within twelve months of the end of the financial year in respect of that financial year. They are recognised in the income statement under "Personnel expenses", including amounts remaining due on the reporting date.

3.10.2 Long-term benefits

Long-term benefits are benefits generally related to seniority, paid to active employees more than twelve months after the closing of the financial year. These commitments are provisioned based on the value on the reporting date. They are measured using the same actuarial method as that applied to post-employment benefits.

Long-term benefits include in particular the "Time Savings Account", set up by the Group's parent company on 1 October 2018. The time savings account allows the beneficiary to:

- accumulate a maximum of 8 hours per week and a total maximum of 1.800 hours,
- accumulate unused holidays beyond 25 days per year up to the limit of a maximum of 1.800 hours,
- use the accumulated hours as leave or, only upon definitive termination of the employment relationship, as compensation.

3.10.3 Post-employment benefits

The Bank's staff members, whether civil servants or not, are entitled to the pension scheme for civil servants as applicable to them in accordance with the legal provisions according to their respective status and entry into service with the Bank, pursuant to the Organic Law of 24 March 1989.

The amount of the benefit covered by the Bank for an agent who is not a civil servant is based on the difference between the amount of the said benefit as provided by the civil service pension scheme and the amount of the benefit under the pension scheme for private sector employees.

Pension supplements payable in this regard concern the following benefits:

- old age pension;
- disability pension;
- surviving spouse/partner pension;
- surviving orphan pension;
- three-month additional pension.

Pensions for employees who are classed as civil servants are also paid for by the Bank.

Thus, this scheme is inherently a defined-benefit plan which finances commitments relating to the first pillar.

Members of the Executive Committee are civil servants and are consequently eligible for the same pension scheme for civil servants as the Bank's other staff members.

Because of their mandate as a director of the Bank, members of the Bank's Board of Directors are not eligible for the pension scheme for civil servants or a pension supplement pursuant to the aforementioned Organic Law of 24 March 1989.

On 1 December 2009, the pension fund was outsourced to the BCEE sub-fund of the "Compagnie Luxembourgeoise de Pension (CLP)", established as a retirement saving association (*association d'épargne-pension* - ASSEP). Therefore, the amount entered in the balance sheet is the present value of the defined-benefit obligation as at the reporting date, net of plan assets and of adjustments related to unrecognised actuarial gains and losses and past services costs.

The defined benefit obligation is calculated each year by independent actuaries according to the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the future cash disbursements based on the interest rate of high-quality corporate bonds, denominated in the currency of the payment of the benefit, the term of which is close to the estimated average term of the post-employment benefit obligation.

The sum total of the following amounts represents the annual pension expenses of the Bank:

- the current service cost;
- interest cost resulting from the application of the discount rate;
- the change in actuarial gains and losses;

these amounts are net of the expected return on plan assets.

Actuarial gains and losses are systematically recognised under "Reserves" in equity.

The calculation of the defined-benefit obligation has, since 2015, been based on the DAV2004R generation tables which most closely resemble the longevity of Luxembourg's white-collar population. In prior years, the calculation of the defined-benefit obligation had been based on the IGSS (General Inspectorate of Social Security) mortality tables with an allowance made for a five-year improvement.

3.10.4 Investment policy of the Compagnie Luxembourgeoise de Pension (CLP)

The management objective of the "CLP-BCEE" sub-fund is threefold: to coordinate the various cash flows, to minimise the portfolio's volatility and the probability of an extraordinary contribution request, and to coincide the actual yield with the induced yield. To achieve these objectives, the "CLP-BCEE" sub-fund is authorised to invest in the following instruments:

- Conventional financial instruments:
  - Securities negotiable on the capital market:
    - Shares in companies or other equivalent securities,
    - Bonds and other debt securities,
  - Money market instruments such as treasury bills, certificates of deposit, commercial paper and treasury notes,
  - Shares and units in undertakings for collective investment, including Exchange Traded Funds.
- Derivative financial instruments: options, futures, swaps, rate agreements and all other derivatives related to securities, money market instruments, undertakings for collective investment, currencies, interest rates, exchange rates, commodities, yields, other derivative financial instruments, financial indices or financial measures.
- Liquidity: all forms of conventional sight and term deposits.
- Other instruments: this category includes instruments that do not fall under one of the above-referenced categories, for example, units in specialised investment funds, in venture capital firms, etc., as well as real estate and land.

The "CLP-BCEE" sub-fund invests a minimum of 65% of its gross assets in bonds, debt securities and money market financial instruments. Secondarily, "CLP-BCEE" can invest up to 35% of its assets in

shares, equivalent securities and other instruments, but may not exceed the limit of 10% of gross assets for other instruments. For the purpose of diversification, investments made with the same issuer or counterparty may not exceed 25% of gross assets. The use of derivative financial instruments is permitted by the investment policy for the purpose of hedging and/or efficient management of the portfolio.

Eligible bonds and money market financial instruments will have a minimum rating of BBB- (Standard & Poor's) or Baa3 (Moody's); similarly, the issuer must be from a member country of the European Union or the OECD.

The CLP-BCEE sub-fund's investment policy authorises securities lending and repo transactions.

Any change to the investment policy is subject to the prior approval of the Board of Directors of the CLP and the Supervisory Authority.

3.11 Provisions

According to IAS 37, a provision is a liability of uncertain timing or amount, but which represents an obligation towards a third party arising from past events and the settlement of which is more than 50% likely to result in an outflow of resources embodying economic benefits.

The Bank recognises a provision at the present value when a reliable estimate can be made of the amount of the obligation.

3.12 ***Fonds de garantie des dépôts Luxembourg*** **(FGDL, Luxembourg deposit guarantee fund) and** ***Fonds de résolution Luxembourg*** **(FRL, Luxembourg resolution fund)**

On 18 December 2015, Luxembourg passed the law on the resolution, recovery and liquidation measures of credit institutions and some investment firms and on deposit guarantee and investor compensation schemes (the "Law"), transposing into Luxembourg law Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms, as well as Directive 2014/49/EU on deposit guarantee and investor compensation schemes.

The Law replaces Luxembourg's deposit guarantee and investor compensation scheme, implemented by the AGDL, with a contribution-based deposit guarantee and investor compensation scheme. This scheme covers all eligible deposits by a single depositor up to EUR 100.000 and investments up to EUR 20.000. In addition, the Law requires that deposits arising from specific transactions, fulfilling a social objective, or relating to particular life events be covered above the limit of EUR 100.000 for a 12-month period.

The target level of funding of the new "Fonds de Garantie des Dépôts Luxembourg" (FGDL) is set at 0,8% of the covered deposits (as defined in Article 163(8) of the Law) of member institutions and is expected to be reached by the end of 2018 thanks to the annual contributions from 2016 to 2018.

By the end of 2024, the amount of financial resources of the *Fonds de résolution Luxembourg* (FRL, Luxembourg resolution fund) should reach at least 1% of the guaranteed deposits, as defined in article 1, number 36 of the Law, of all authorised credit institutions in all participating member States. This amount is being collected from credit institutions through annual contributions during financial years 2015 to 2024.

Starting in 2019, Luxembourg credit institutions will continue to contribute for another eight years to provide an additional cushion of 0,8% of covered deposits as defined in Article 163(8) of the Law.

Contributions to the FGDL and the FRL are made through the income statement in operating expenses.

3.13 Deferred taxes

Deferred tax assets and liabilities are recognised on temporary differences arising between the tax base of assets and liabilities and their book values or when there are adjustments related to the accounting framework of the subsidiaries. Deferred tax assets and liabilities are calculated using the comprehensive calculation method, which takes into account all temporary differences, regardless of the date on which the tax will become payable or recoverable.

The rates used and tax laws applied to calculate deferred taxes are those that will apply when the tax becomes payable or recoverable.

Deferred tax assets are recognised to the extent that it is probable that the entity will recover the asset within a given time frame. Deferred taxes relating to unrealised gains or losses on variable-income securities recognised at fair value through the revaluation reserve and to changes in the value of derivative financial instruments designated as cash flow hedges are recognised in equity under "Revaluation reserve". Deferred taxes on actuarial gains and losses related to the Group's pension plan commitments are recognised in equity under "Consolidated reserves".

4 NOTES TO THE BALANCE SHEET[3]

(in euros)

4.1 Cash and sight accounts with central banks

Cash consists of cash, cash balances with central banks and other sight deposits with banks. The minimum reserve requirement with the Banque centrale du Luxembourg is entered under "Deposits with central banks".

Headings*	31/12/2017	31/12/2018
Cash	93.598.278	70.836.202
Deposits with central banks	5.120.800.050	3.935.963.844
Other deposits at sight	313.486.772	230.436.545
Total	**5.527.885.100**	**4.237.236.592**
Impairment of financial assets		-257.151
of which FTA impact		*-302.352*

* term of less than one year

[3] Minor differences between the figures in the notes to the consolidated financial statements and the figures in the different consolidated statements are rounding differences only.

4.2 Loans and advances at amortised cost – Credit institutions

Headings	31/12/2017 =<1 year	31/12/2017 > 1 year	31/12/2017 Total	31/12/2018 =<1 year	31/12/2018 > 1 year	31/12/2018 Total
Interbank loans	1.923.231.233	115.718.862	2.038.950.095	1.644.592.706	180.205.661	1.824.798.367
Reverse repurchase/Repurchase agreements	864.392.237	299.775.275	1.164.167.512	452.442.877	200.004.212	652.447.089
Roll-over loans	47.566.796	-	47.566.796	53.869.044	-	53.869.044
Finance leases	381.595	230.496	612.091	50	258.566	258.616
Fixed-income securities	117.582.446	267.320.419	384.902.864			
Other	35.187.534	-	35.187.534	49.209.827	-	49.209.827
Sub-total	**2.988.341.842**	**683.045.051**	**3.671.386.893**	**2.200.114.504**	**380.468.439**	**2.580.582.943**
Undrawn confirmed credits			395.928.677			308.924.579
Impairment of financial assets				-		-1.128.895
of which FTA impact						*-1.165.109*

In the case of reverse repurchase transactions, the Group becomes the legal owner of the securities received as collateral and has the right to sell or collateralise these securities. No securities received as collateral were sold or collateralised in 2017 and 2018.

Changes in impairment from 1 January 2018 to 31 December 2018:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2018	**1.165.083**	**26**	-	**1.165.109**
Stage transfers	**4**	**-4**	-	-
Transfer from Stage 1	-2	2	-	-
Transfer from Stage 2	7	-7	-	-
Transfer from Stage 3	-	-	-	-
Other	-	-	-	-
Position as at 31 December 2018 before changes	**1.165.087**	**22**	**-**	**1.165.109**
Changes	**-36.282**	**69**	**-**	**-36.213**
Increase due to acquisition and origination	893.923	-	-	893.923
Decrease due to repayment	-17.936	-	-	-17.936
Change related to credit risk	-914.732	69	-	-914.663
Other changes	-	-	-	-
Write-off	-	-	-	-
Exchange gain or loss	2.463	-	-	2.463
Situation as at 31 December 2018	**1.128.805**	**90**	**-**	**1.128.895**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	311	-311	-	-
Transfer from Stage 2	-409	409	-	-
Transfer from Stage 3	-	-	-	-
Outstanding amounts covered by provisions at 31/12/2018	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
Outstanding amounts	2.546.560.816	8.480	-	2.546.569.296

The Group does not include in this category of loans and advances any outstanding loans that are defined as restructured loans according to the EBA or outstanding amounts covered by provisions.

4.3 Loans and advances at amortised cost – Customers

Headings	31/12/2017 =<1 year	31/12/2017 > 1 year	31/12/2017 Total	31/12/2018 =<1 year	31/12/2018 > 1 year	31/12/2018 Total
"Retail" customers	443.642.031	13.173.313.097	13.616.955.128	484.606.186	14.161.359.105	14.645.965.291
"Corporate" customers	1.896.326.719	3.511.866.047	5.408.192.766	1.519.382.869	3.936.078.944	5.455.461.813
Public sector	1.128.364.468	759.263.082	1.887.627.550	957.027.743	737.730.084	1.694.757.828
Sub-total	**3.468.333.218**	**17.444.442.226**	**20.912.775.444**	**2.961.016.798**	**18.835.168.134**	**21.796.184.932**
Undrawn confirmed credits			5.370.706.244			5.042.602.610
Impairment of financial assets			-93.085.687			-119.379.985
of which FTA impact			-			*-43.361.125*

Of which finance leases:

Headings	31/12/2017 =<1 year	31/12/2017 > 1 year	31/12/2017 Total	31/12/2018 =<1 year	31/12/2018 > 1 year	31/12/2018 Total
Finance leases	7.975.440	111.521.142	119.496.582	10.450.532	110.403.663	120.854.195
Sub-total	**7.975.440**	**111.521.142**	**119.496.582**	**10.450.532**	**110.403.663**	**120.854.195**

Impairment of loans and advances - Customers

	Retail customers	Corporate	Public sector	Total
Situation as at 1 January 2017	**31.616.628**	**68.331.050**	**-**	**99.947.678**
Additions	5.691.596	6.599.103	-	12.290.699
Reversals	-5.078.953	-12.230.726	-	-17.309.678
Write-off of receivables (*)	-439.072	-1.403.940	-	-1.843.012
Exchange gain or loss	-	-	-	-
Situation as at 31 December 2017	**31.790.200**	**61.295.487**	**-**	**93.085.687**
Impairment of assets - individual risk	17.771.152	61.295.487	.	79.066.639
Impairment of assets - collective risk	14.019.048	-	-	14.019.048
Total	**31.790.200**	**61.295.487**	**-**	**93.085.687**

(*) Write-off of receivables represents the amounts considered as permanently lost on impaired assets.

Outstanding amounts of impaired loans: EUR 307.132.366 at 31 December 2017.

Value adjustments cover the principal and interest.

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2018	**16.068.034**	**41.434.063**	**78.946.715**	**136.448.812**
of which				
"Retail" customers	*2.422.355*	*17.754.327*	*17.493.774*	*37.670.456*
"Corporate" customers	*13.587.287*	*23.679.737*	*61.452.941*	*98.719.965*
Public sector	*58.391*	*-*	*-*	*58.391*
Stage transfers	**12.800.502**	**-8.205.551**	**-4.596.951**	**-1.999**
"Retail" customers	6.761.954	-3.901.570	-2.684.465	175.919
Transfer from Stage 1	*-180.054*	*152.004*	*28.050*	*-*
Transfer from Stage 2	*6.717.559*	*-6.717.559*	*-*	*-*
Transfer from Stage 3	*216.652*	*2.493.863*	*-2.710.515*	*-*
other	*7.798*	*170.122*	*-2.000*	*175.919*
"Corporate" customers	6.038.548	-4.303.981	-1.912.485	-177.919
Transfer from Stage 1	*-289.757*	*268.935*	*20.822*	*-*
Transfer from Stage 2	*6.031.480*	*-6.544.891*	*513.411*	*-*
Transfer from Stage 3	*304.621*	*2.142.097*	*-2.446.719*	*-*
other	*-7.797*	*-170.122*	*-*	*-177.919*
Public sector	-	-	-	-
Transfer from Stage 1	*-*	*-*	*-*	*-*
Transfer from Stage 2	*-*	*-*	*-*	*-*
Transfer from Stage 3	*-*	*-*	*-*	*-*
other	*-*	*-*	*-*	*-*
Position as at 31 December 2018 before changes	**28.868.536**	**33.228.513**	**74.349.765**	**136.446.813**
of which				
"Retail" customers	*9.184.310*	*13.852.757*	*14.809.309*	*37.846.375*
"Corporate" customers	*19.625.834*	*19.375.756*	*59.540.456*	*98.542.047*
Public sector	*58.391*	*-*	*-*	*58.391*
Changes	**-11.228.032**	**-1.909.448**	**-3.929.347**	**-17.066.827**
Increase due to acquisition and origination	7.410.994	1.513.543	10.004	8.934.540
Decrease due to repayment	-627.878	-610.953	-1.682.805	-2.921.636
Change related to credit risk	-18.016.948	-2.813.673	-1.769.621	-22.600.241
Write-off	-	1.634	26	1.660
Other changes	-31	-	-575.703	-575.734
Exchange gain or loss	5.830	1	88.752	94.583
Situation as at 31 December 2018	**17.640.503**	**31.319.065**	**70.420.417**	**119.379.985**
of which				
"Retail" customers	*2.468.640*	*17.609.502*	*12.834.552*	*32.912.695*
"Corporate" customers	*15.134.631*	*13.709.563*	*57.585.865*	*86.430.059*
Public sector	*37.231*	*-*	*-*	*37.231*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
"Retail" customers	**38.217.020**	**-35.440.961**	**-2.776.060**	**-**
Transfer from Stage 1	*-591.377.468*	*586.128.198*	*5.249.270*	-
Transfer from Stage 2	*624.050.221*	*-636.688.433*	*12.638.212*	-
Transfer from Stage 3	*5.544.267*	*15.119.275*	*-20.663.542*	-
"Corporate" customers	**44.241.806**	**-40.489.663**	**-3.752.143**	**-**
Transfer from Stage 1	*-71.101.106*	*69.889.212*	*1.211.894*	-
Transfer from Stage 2	*114.128.610*	*-116.286.968*	*2.158.358*	-
Transfer from Stage 3	*1.214.303*	*5.908.092*	*-7.122.395*	-
Public sector	**-**	**-**	**-**	**-**
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-

Outstanding amounts covered by provisions at 31/12/2018	Stage 1	Stage 2	Stage 3	Total
"Retail" customers	13.294.042.675	1.318.681.330	66.153.991	14.678.877.996
"Corporate" customers	4.940.533.768	404.066.363	197.291.731	5.541.891.862
Public sector	1.694.795.059	-	-	1.694.795.059

In addition to information on impairments of loans and advances at amortised cost – Customers, the Group reports restructured loans by type of customer. Financial restructurings follow the EBA's definition and are characterised by a deterioration in financial position due to the customer's financial difficulties and the fact that new financing conditions are granted to the customer, including in the form of an extension of the final maturity by more than six months or the partial or total deferment of payment beyond the concessions the Group would have been willing to accept for a customer under normal circumstances.

At 31/12/2018	Performing restructured loans		Non-performing restructured loans		Total restructured loans	
	Loan	Impairment	Loan	Impairment	Loan	Impairment
Retail customers	29.559.727	736.036	11.650.585	1.850.590	41.210.311	2.586.625
"Corporate" customers	19.539.702	125.858	169.320.520	32.142.491	188.860.222	32.268.348
Total	**49.099.428**	**861.893**	**180.971.105**	**33.993.080**	**230.070.534**	**34.854.973**

At 31/12/2017	Unimpaired restructured loans	Impaired restructured loans			Total restructured loans
		Loan	Impairment	Total	
"Retail" customers	18.148.801	14.138.720	2.577.087	11.561.633	29.710.433
"Corporate" customers	58.384.157	163.059.037	33.048.511	130.010.526	188.394.682
Total	**76.532.957**	**177.197.756**	**35.625.598**	**141.572.158**	**218.105.116**

4.4 Assets and liabilities held for trading

Financial instruments held for trading are analysed by counterparty and type, differentiating between the instruments with a maturity up to one year and those with a maturity of more than one year.

Assets		31/12/2017			31/12/2018	
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Non-derivative financial instruments	-	22.713	22.713	-	-	-
Derivative financial instruments (note 4.14.)	46.166.102	39.149.719	85.315.821	185.367.400	34.849.147	220.216.547
Total	**46.166.102**	**39.172.432**	**85.338.534**	**185.367.400**	**34.849.147**	**220.216.547**

Liabilities		31/12/2017			31/12/2018	
Non-derivative financial instruments	-	-	-	-	-	-
Derivative financial instruments (note 4.14.)	138.533.393	63.583.439	202.116.831	60.944.652	72.386.736	133.331.388
Total	**138.533.393**	**63.583.439**	**202.116.831**	**60.944.652**	**72.386.736**	**133.331.388**

Assets - Non-derivative financial instruments		31/12/2017			31/12/2018	
Debt instruments	-	**22.713**	**22.713**	-	-	-
Public sector	-	-	-	-	-	-
Credit institutions	-	-	-	-	-	-
"Corporate" customers	-	*22.713*	*22.713*	-	-	-
Equity instruments	-	-	-	-	-	-
Total	-	**22.713**	**22.713**	-	-	-
Unrealised profit/loss at the reporting date	-	-	-	-	-	-

Liabilities - Non-derivative financial instruments		31/12/2017			31/12/2018	
Short sales	-	-	-	-	-	-
Bonds	-	-	-	-	-	-
Shares	-	-	-	-	-	-
Total	-	-	-	-	-	-

4.5 Financial assets designated at fair value through profit or loss

Headings		31/12/2017	
	=<1 year	> 1 year	Total
Debt instruments			
Public sector	-	54.473.834	54.473.834
Credit institutions	-	296.866.320	296.866.320
"Corporate" customers	-	196.777.345	196.777.345
Total	**-**	**548.117.498**	**548.117.498**
Unrealised profit/loss at the reporting date	-	*2.678.361*	*2.678.361*

This item includes financial instruments which, according to IAS 39, depending on their characteristics, incorporate derivative components that are not directly related and are therefore not eligible for measurement at fair value through the revaluation reserve.

Breakdown of changes in carrying amount:

Debt instruments	2017
Situation as at 1 January	**262.150.671**
Acquisitions	287.683.515
Sales	-
Repayments	-
Realised profit/(loss)	-
Pro-rata interest	-3.705.286
Unrealised valuations	1.988.599
Situation as at 31 December	**548.117.498**

4.6 Financial assets mandatorily measured at fair value through profit or loss

Headings		31/12/2018	
	=<1 year	> 1 year	Total
Debt instruments	**156.778.121**	**1.075.257.042**	**1.232.035.164**
Public sector	-	*65.002.389*	*65.002.389*
Credit institutions	*36.289.963*	*594.862.671*	*631.152.634*
"Corporate" customers	*120.488.159*	*415.391.982*	*535.880.141*
Loans and advances	**-**	**2.805.188**	**2.805.188**
Public sector	-	-	-
Credit institutions	-	-	-
"Corporate" customers	-	*2.805.188*	*2.805.188*
Total	**156.778.121**	**1.078.062.230**	**1.234.840.351**
Unrealised profit/loss at the reporting date	4.240.266	-4.420.966	-180.700

This item includes financial instruments that, according to IFRS 9, do not pass the SPPI test and are therefore to be measured at fair value through profit or loss.

Breakdown of changes in carrying amount of debt instruments:

Debt instruments	2018
Situation as at 1 January	**1.217.592.537**
Acquisitions	117.021.867
Sales	-20.542.230
Repayments	-61.282.969
Realised profit/(loss)	3.775.088
Pro-rata interest	-7.157.274
Unrealised valuations	-17.534.405
Exchange gain or loss	162.549
Situation as at 31 December	**1.232.035.165**

4.7 Available-for-sale financial assets

Available-for-sale financial states are analysed by counterparty and type, differentiating between the instruments with a maturity up to one year and those with a maturity of more than one year.

Headings	=<1 year	31/12/2017 > 1 year	Total
Debt instruments	**1.421.973.683**	**7.712.116.779**	**9.134.090.462**
Public sector	*254.610.624*	*1.992.757.496*	*2.247.368.120*
Credit institutions	*848.968.934*	*3.613.573.565*	*4.462.542.499*
Corporate customers	*318.394.125*	*2.105.785.718*	*2.424.179.843*
Equity instruments	**832.066.938**	**-**	**832.066.938**
Credit institutions	*3.505.601*	*-*	*3.505.601*
Corporate customers	*827.704.357*	*-*	*827.704.357*
Other	*856.980*	*-*	*856.980*
Total	**2.254.040.621**	**7.712.116.779**	**9.966.157.400**
Impairment of financial assets	-4.272.917	-16.421.550	-20.694.467
Unrealised profit/loss at the reporting date	392.614.634	260.014.183	652.628.817

Impairment of available-for-sale financial assets:

	"Corporate" customers		Credit institutions	Total
	ABS/MBS	Other		
Situation as at 1 January 2017	**27.805.559**	**15.908.247**	**-**	**43.713.804**
Additions	-	-	-	-
Reversals	-5.958.992	-4.796.394	-	-10.755.386
Write-off of receivables (*)	-	-9.850.242	-	-9.850.242
Exchange gain or loss	-1.152.100	-1.261.609	-	-2.413.709
Situation as at 31 December 2017	**20.694.467**	**-**	**-**	**20.694.467**

(*) Write-off of receivables represents the amounts considered as permanently lost on impaired assets.

Unrealised profit/loss on available-for-sale financial assets:

The unrealised profit/loss as at the reporting date breaks down as follows:

- **Debt instruments**

Debt instruments include variable-rate bonds, fixed-rate bonds and structured bonds. Fixed-rate and structured bonds are converted into variable-rate bonds using derivative financial instruments (asset swaps). The Group applies fair value hedge accounting to these transactions. Prospective and retrospective effectiveness is close to 100%.

31/12/2017	Fair value adjustments of debt instruments		Fair value adjustments of the swap leg hedging the asset	
	Change in unhedged value ("credit and liquidity spread")	Hedged change in value (interest rates and prices)	Changes in hedge value	Retrospective effectiveness rate
Fixed-rate bonds and structured bonds	86.895.158	173.473.034	-173.473.034	100.00%
Variable-rate bonds	13.899.661			

Breakdown of changes in carrying amount:

Debt instruments	2017
Situation as at 1 January	**9.805.099.257**
Acquisitions	1.239.842.021
Sales	-40.123.019
Repayments	-1.644.253.898
Realised profit/(loss)	827.326
Pro-rata interest	-44.862.379
Unrealised valuations	-78.365.577
Impairment	11.861.091
Exchange gain or loss	-115.934.360
Situation as at 31 December	**9.134.090.462**

- **Equity instruments**

Headings	31/12/2017
Equity instruments	832.066.938
Total	**832.066.938**
Impairment of financial assets	-
Unrealised profit/loss at the reporting date	378.360.964

Breakdown of changes in carrying amount:

Equity instruments	2017
Situation as at 1 January	**1.074.144.424**
Acquisitions	28.555.089
Sales	-37.786.736
Realised profit/(loss)	23.165.172
Unrealised valuations	-261.180.542
Impairment	11.158.250
Exchange gain or loss	-5.988.720
Situation as at 31 December	**832.066.938**

4.8 Fixed-income securities recognised at amortised cost

Headings	31/12/2018		
	=<1 year	> 1 year	Total
Debt instruments	**4.114.695.730**	**10.111.963.294**	**14.226.659.023**
Public sector	*445.730.675*	*2.288.315.564*	*2.734.046.239*
Credit institutions	*2.510.601.196*	*5.354.332.562*	*7.864.933.758*
"Corporate" customers	*1.158.363.858*	*2.469.315.168*	*3.627.679.026*

Breakdown of changes in carrying amount:

Debt instruments	2018
Situation as at 1 January	**12.914.000.168**
Acquisitions	3.768.571.198
Sales	-
Repayments	-2.410.470.008
Realised profit/(loss)	-65.495
Pro-rata interest	-34.894.208
Unrealised valuations of hedges	-20.535.186
Impairment	3.935.311
Exchange gain or loss	6.117.243
Situation as at 31 December	**14.226.659.023**

Table detailing the provisioning:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2018	**7.207.851**	**172.044**	**8.362.241**	**15.742.136**
of which				
Public sector	*732.031*	-	-	*732.031*
Credit institutions	*4.199.104*	-	-	*4.199.104*
"Corporate" customers	*2.276.716*	*172.044*	*8.362.241*	*10.811.001*
Stage transfers	**2.866.394**	**831.908**	**-3.698.302**	-
Public sector				
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-
Credit institutions				
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-
"Corporate" customers				
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	*119.981*	*-119.981*	-	-
Transfer from Stage 3	*2.746.413*	*951.889*	*-3.698.302*	-
Position as at 31 December 2018 before changes	**10.074.246**	**1.003.952**	**4.663.938**	**15.742.136**
Changes	**-2.343.312**	**-978.756**	**-613.243**	**-3.935.311**
Increase due to acquisition and origination	2.172.413	-	-	2.172.413
Decrease due to repayment	-	-	-	-
Change related to credit risk	-4.518.444	-978.756	-613.682	-6.110.882
Other changes	-	-	-	-
Write-off	-	-	-	
Exchange gain or loss	2.719	-	438	3.158
Situation as at 31 December 2018	**7.730.934**	**25.196**	**4.050.695**	**11.806.825**
of which				
Public sector	*546.290*	-	-	*546.290*
Credit institutions	*4.067.444*	-	-	*4.067.444*
"Corporate" customers	*3.117.199*	*25.196*	*4.050.695*	*7.193.090*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Public sector	**-**	**-**	**-**	**-**
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-
Credit institutions	-	-	-	-
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-
"Corporate" customers	**20.204.777**	**-823.728**	**-19.381.049**	**-**
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	*3.231.168*	*-3.231.168*	-	-
Transfer from Stage 3	*16.973.610*	*2.407.439*	*-19.381.049*	-

Exposure by stage at 31 December 2018	Stage 1	Stage 2	Stage 3	Total
Public sector	2.734.592.530	-	-	2.734.592.530
Credit institutions	7.869.001.203	-	-	7.869.001.203
"Corporate" customers	3.620.168.091	7.497.262	7.206.764	3.634.872.116

4.9 Variable-income securities recognised at fair value through the revaluation reserve

Headings	31/12/2018
Equity instruments	**863.396.081**
Credit institutions	*3.666.600*
Corporate	*859.729.481*
Unrealised profit/loss through the revaluation reserve	529.021.573
Dividends received during the period	31.108.012
of which dividends from positions sold during the period	-
Gains/losses on sales in equity	808.399

Breakdown of changes in carrying amount:

Equity instruments	2018
Situation as at 1 January	**699.476.204**
Acquisitions	1.770.222
Sales	-514.215
Profit/(loss) realised through own funds	808.399
Unrealised valuations	159.805.528
Exchange gain or loss	2.049.944
Situation on 31 December	**863.396.081**

4.10 Securities held to maturity

Headings		31/12/2017	
	=<1 year	> 1 year	Total
Debt instruments			
Public sector	121.492.999	578.198.152	699.691.151
Credit institutions	439.835.989	2.081.397.359	2.521.233.349
"Corporate" customers	231.452.737	494.005.881	725.458.618
Total	**792.781.725**	**3.153.601.393**	**3.946.383.118**

No impairment loss on held-to-maturity securities has been recognised by the Group.

Breakdown of changes in carrying amount:

Held-to-maturity securities	2017
Situation on 1 January	**4.572.783.470**
Acquisitions	894.978.144
Repayments	-1.522.932.674
Pro-rata interest	1.707.459
Exchange gain or loss	-153.281
Situation on 31 December	**3.946.383.118**

4.11 Investments in associates accounted for using the equity method

	31/12/2017	31/12/2018
Acquisition value on 1 January	**54.227.634**	**54.227.636**
Establishment	4	1.391.835
Disposals	-2	-4.155.690
Total (as acquisition value)	**54.227.636**	**51.463.781**

List of associates:

Associates	% of capital held	Acquisition value	Equity-accounted value 2018
Société Nationale de Circulation Automobile S.à r.l.	20,00	24.789	6.758.684
Luxair S.A.	21,81	14.830.609	98.352.343
Société de la Bourse de Luxembourg S.A.	22,75	128.678	24.029.499
Europay Luxembourg S.C.	30,10	188.114	775.563
LuxHub S.A.	32,50	1.300.000	665.311
Visalux S.C.	34,66	365.306	7.782.260
Lalux Group S.A.	40,00	28.904.385	215.530.085
BioTechCube (BTC) Luxembourg S.A.	50,00	5.000.000	720.073
Sub-total direct holdings in associates		**50.741.882**	**354.613.819**
EFA Partners S.A.	29,05	551.900	719.160
Pecoma International S.A.	33,33	170.000	219.542
Sub-total indirect holdings in associates		**721.900**	**938.702**
Total		**51.463.781**	**355.552.521**

Associates	% of capital held	Acquisition value	Equity-accounted value 2017
Société Nationale de Circulation Automobile S.à r.l.	20,00	24.789	6.280.680
Luxair S.A.	21,81	14.830.609	97.089.381
Société de la Bourse de Luxembourg S.A.	22,75	128.678	25.160.848
Europay Luxembourg S.C.	25,40	96.279	7.648.911
FS-B S.à r.l.	28,70	3.003.694	3.356.064
FS-T S.à r.l.	28,70	1.104.793	1.032.206
Visalux S.C.	36,25	412.508	8.632.692
Lalux Group S.A.	40,00	28.904.385	227.234.883
BioTechCube (BTC) Luxembourg S.A.	50,00	5.000.000	740.483
Sub-total direct holdings in associates		**53.505.736**	**377.176.150**
EFA Partners S.A.	29,05	551.900	699.185
Pecoma International S.A.	33,33	170.000	244.961
Sub-total indirect holdings in associates		**721.900**	**944.146**
Total		**54.227.636**	**378.120.296**

During 2018, the FS-T and FS-B positions were sold. The Group's parent company also participated in the formation of LuxHub S.A., whose main activity is to offer services and solutions in the context of the European PSD2 directive.

With one exception, the financial statements of associates have been restated to comply with IFRS 9. That one exception is the Lalux Group S.A. entity, which refers to Regulation (EU) 2017/1988 published in the official journal on 9 November 2017 and concerning amendments to IFRS 4 Insurance Contracts. This regulation introduces certain exemptions for entities that operate in the insurance sector and are consolidated in the financial statements of financial conglomerates under IFRS 9 until financial year 2022.

Pursuant to the provisions of IFRS 12 Disclosure of Interests in Other Entities, the Group considers all interests in other companies to be immaterial and therefore provides the following information:

Associates	2018			
	Net income from continuing operations	Net income after tax from discontinued operations	Other items of comprehensive income	Total comprehensive income
Direct interests	**12.281.427**	-	**1.505.106**	**13.786.533**
Société Nationale de Circulation Automobile S.à r.l.	482.100	-	325.941	808.041
Luxair S.A.	-2.428.329	-	3.975.488	1.547.159
Société de la Bourse de Luxembourg S.A.	1.882.735	-	215.135	2.097.870
Europay Luxembourg S.C.	-231.604	-	-3.403.159	-3.634.763
FS-B S.à.r.l.	-	-	-281.339	-281.339
FS-T S.à.r.l.	-	-	87.509	87.509
LuxHub S.A.	-634.689	-	-	-634.689
Visalux S.C.	-1.010.894	-	-1.166.298	-2.177.192
Lalux Group S.A.	14.238.120	-	1.767.281	16.005.401
BioTechCube (BTC) Luxembourg S.A.	-16.012	-	-15.452	-31.464
Indirect interests	**108.762**	-	**-3.053**	**105.709**
EFA Partners S.A.	111.856	-	42	111.898
Pecoma International S.A.	-3.094	-	-3.095	-6.189
Total	**12.390.189**	-	**1.502.053**	**13.892.242**

Associates	2017			
	Net income from continuing operations	Net income after tax from discontinued operations	Other items of comprehensive income	Total comprehensive income
Direct interests	**40.343.899**	-	**-35.023.995**	**5.319.904**
Société Nationale de Circulation Automobile S.à r.l.	324.299	-	-1.255.714	-931.415
Luxair S.A.	1.766.873	-	-2.872.821	-1.105.948
Société de la Bourse de Luxembourg S.A.	3.008.253	-	-1.618.982	1.389.271
Europay Luxembourg S.C.	7.317.681	-	973.732	8.291.413
FS-B S.à.r.l.	71.031	-	-401.786	-330.755
FS-T S.à.r.l.	14.922	-	-66.008	-51.086
Visalux S.C.	-296.099	-	222.758	-73.341
Lalux Group S.A.	28.147.432	-	-30.003.945	-1.856.513
BioTechCube (BTC) Luxembourg S.A.	-10.493	-	-1.229	-11.722
Indirect interests	**111.153**	-	**47.147**	**158.300**
EFA Partners S.A.	91.923	-	9.026	100.949
Pecoma International S.A.	19.230	-	38.121	57.351
Total	**40.455.052**	-	**-34.976.848**	**5.478.204**

4.12 Securities collateralised

- Securities collateralised in the framework of repurchase agreements

Headings	31/12/2017	31/12/2018
Debt instruments issued by the public sector	1.433.036.026	335.451.247
Debt instruments issued by credit institutions	474.179.952	306.666.187
Debt instruments issued - others	161.961.513	289.050.940
Equity instruments	-	-
Total	2.069.177.491	931.168.374

Debt instruments are derived mainly from fixed-income securities measured at amortised cost for the 2018 financial year and from portfolios of available-for-sale financial instruments and the portfolio of assets held to maturity for the 2017 financial year.

The decrease observed in debt instruments stems from the smaller number of collateral security agreements as at 31 December 2018.

- Securities lent and other collateral

Headings	31/12/2017	31/12/2018
Securities lending		
Debt instruments issued by the public sector	493.950.715	642.071.306
Debt instruments issued by credit institutions	8.626.184	157.676.149
Debt instruments issued - others	73.865.360	95.000.741
Other collateral		
Debt instruments issued by the public sector	10.402.862	-
Total	**586.845.121**	**894.748.197**

4.13 Convertible bonds included in the different portfolios

As in the prior year, the Group held no convertible bonds in its portfolio at 31 December 2018.

4.14 Derivative instruments

With regard to financial derivatives, the Group distinguishes between financial instruments held for trading and hedging derivatives. Among the hedging instruments, the following should be separated:

- Fair value hedging: The Group's fair value hedging consists in hedging against changes in the fair value of the interest rate component of debt instruments. Hedged items consist of loans, securities and issues of EMTN at fixed rates. Loans can be micro- or macro-hedged. The revaluation of fair

value for interest rate risk of these hedged instruments impacts the income statement. This hedging is achieved through the use of IRS.

- Cash flow hedging: Cash flow hedging applies to two types of risks. On the one hand, the Group applies this type of hedge to freeze the cash flows of variable-rate loans. On the other hand, it applies to fixed-rate bonds in foreign currencies for which the Group deems it necessary to hedge foreign exchange risk. This hedging is achieved through the use of IRS and CIRS. Revaluation of the fair value of these derivatives impacts comprehensive income through the cash flow hedging reserve.

The measurement of the effectiveness of fair value and cash flow hedging is described in section 3.2.2.

Categories on 31/12/2018	Assets	Liabilities	Notional
Derivative financial instruments held for trading	**220.216.547**	**133.331.388**	**15.425.751.774**
Operations linked to exchange rates	178.107.701	52.951.413	12.408.458.186
- Foreign exchange swaps and forward exchange contracts	*177.431.491*	*52.951.413*	*12.215.995.186*
- CCIS economic hedge	*676.210*	*-*	*3.763.000*
- other	*-*	*-*	*188.700.000*
Operations linked to interest rates	34.223.923	72.495.052	2.969.261.072
- IRS	*32.581.565*	*42.819.227*	*1.567.152.964*
- IRS economic hedge	*724.040*	*28.426.833*	*1.275.583.105*
- other	*918.318*	*1.248.991*	*126.525.003*
Operations linked to equity	7.884.923	7.884.923	48.032.516
- Equity and index options	*7.884.923*	*7.884.923*	*48.032.516*
Fair value hedging derivatives	**43.494.414**	**595.544.439**	**9.623.595.485**
Operations linked to exchange rates	25.900.841	131.188.033	1.334.033.138
- CCIS	*25.900.841*	*131.188.033*	*1.334.033.138*
Operations linked to interest rates	17.593.574	464.356.406	8.289.562.347
- IRS (interest rate)	*17.593.574*	*464.356.406*	*8.289.562.347*
Cash flow hedging derivatives	**21.976.145**	**11.281.850**	**494.156.237**
Operations linked to exchange rates	18.657.253	11.281.850	464.756.237
- CCIS	*18.657.253*	*11.281.850*	*464.756.237*
Operations linked to interest rates	3.318.892	-	29.400.000
- IRS	*3.318.892*	*-*	*29.400.000*

Fair value hedges at 31/12/2018	Balance sheet categories	Fair value of hedged instruments	Change in fair value of hedging instruments	Change in fair value of hedged instruments	Inefficiency	Efficiency rate
Interest rate risk						
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost, Loans and advances at amortised cost – Customers, Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-140.488.686	-23.753.718	21.165.245	-2.588.474	89,10%
Fixed-rate liability instruments	Issuance of debt securities	-934.905	-4.174.609	4.162.321	-12.288	99,71%
Currency risk						
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost, Loans and advances at amortised cost – Customers	-29.760.419	6.509.730	-6.497.946	11.785	99,82%
Fixed-rate liability instruments	Issuance of debt securities	-2.782.386	3.517.066	-3.515.426	1.640	99,95%

Cash flow hedges at 31/12/2018	Balance sheet categories	Change in fair value of hedging instruments	Change in fair value of hedged instruments	Cash flow hedging reserve	
				continuity of hedging	termination of hedging
Interest rate risk					
Fixed-rate asset instruments	Loans and advances at amortised cost - Customers	939.319	-	3.315.726	-
Currency risk					
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost	-486.709	-	-484.924	-

Income on hedging activities recognised in net income and other comprehensive income at 31/12/2018	Net income or other comprehensive income
Fair value hedging (micro + macro hedging)	**2.587.336**
gains (losses) on hedging instruments	18.092.399
gains (losses) on hedged instruments related to the hedged risk	-15.314.194
ineffective part	-190.868
Cash flow hedges	**452.610**
ineffective part	-
effective part	452.610
Reclassified in profit or loss over the period	-

Reconciliation of the equity component at 31/12/2018	Cash flow hedge recognised in revaluation reserve
Balance at 1 January 2018	**3.283.412**
Change in fair value related to hedging:	-452.610
interest rate risk	*-939.319*
foreign exchange risk	*486.709*
Amount reclassified to profit or loss related to hedging of:	-
interest rate risk	-
foreign exchange risk	-
Balance at 31 December 2018	**2.830.802**

Categories on 31/12/2017	Assets	Liabilities	Notional
Derivative financial instruments held for trading	**85.315.821**	**202.116.831**	**14.312.900.976**
Operations linked to exchange rates	48.951.931	132.827.947	12.788.986.714
- Foreign exchange swaps and forward exchange contracts	*48.502.107*	*132.826.825*	*12.601.669.868*
- CCIS economic hedge (FVO)	*448.702*	-	*3.763.000*
- other	*1.122*	*1.122*	*183.553.846*
Operations linked to interest rates	35.460.400	68.385.395	1.444.663.567
- IRS	*34.231.998*	*43.517.331*	*639.375.207*
- IRS economic hedge (FVO)	-	*23.322.914*	*669.598.500*
- other	*1.228.402*	*1.545.149*	*135.689.860*
Operations linked to equity	903.490	903.490	79.250.696
- Equity and index options	*903.490*	*903.490*	*79.250.696*
Fair value hedges (micro)	**48.031.905**	**494.067.233**	**8.482.296.775**
Operations linked to exchange rates	32.811.920	54.449.394	1.169.345.249
- CCIS	*32.811.920*	*54.449.394*	*1.169.345.249*
Operations linked to interest rates	13.683.618	405.006.239	6.344.766.161
- IRS (interest rate)	*13.683.618*	*405.006.239*	*6.344.766.161*
Operations linked to other indices	1.536.366	34.611.600	968.185.365
- IRS (other indices)	*1.536.366*	*34.611.600*	*968.185.365*
Fair value hedges (macro)	**13.984.334**	**92.521.317**	**1.475.796.280**
Operations linked to interest rates	13.984.334	92.521.317	1.475.796.280
- IRS (interest rate)	*13.984.334*	*92.521.317*	*1.475.796.280*
Cash flow hedges	**31.941.418**	**1.909.939**	**486.790.613**
Operations linked to exchange rates	27.678.612	1.909.939	452.390.613
- CCIS	*27.678.612*	*1.909.939*	*452.390.613*
Operations linked to interest rates	4.262.806	-	34.400.000
- IRS	*4.262.806*	-	*34.400.000*

4.15 Change in fair value of a portfolio of financial instruments hedged against interest rate risk

Headings	31/12/2017	31/12/2018
Assets: Change in fair value of a portfolio of financial instruments hedged against interest rate risk	46.597.287	69.027.154
Total	**46.597.287**	**69.027.154**

This item includes the fair value of the "Loans and advances at amortised cost - Customers" portfolios hedged against interest rate risk using a fair value macro-hedging strategy. The hedging relates solely to a portfolio of fixed-rate loans hedged by IRS derivative financial instruments.

The change in this item between 2017 and 2018 is due primarily to a volume effect and to the change in the interest-rate curves used to determine fair value.

4.16 Tangible assets for own use

	Land and buildings	Other equipment and furniture	Total
Situation as at 1 January 2018	**390.830.582**	**66.943.271**	**457.773.853**
Increase	4.365.499	7.941.313	12.306.813
Decrease	-2.404.802	-10.193.004	-12.597.807
Situation as at 31 December 2018	**392.791.279**	**64.691.580**	**457.482.859**
Accumulated depreciation			
Situation as at 1 January 2018	**132.276.041**	**37.154.206**	**169.430.247**
Depreciation	-2.243.743	-10.140.482	-12.384.224
Additions	12.291.885	10.183.698	22.475.583
Situation as at 31 December 2018	**142.324.183**	**37.197.422**	**179.521.606**
Net book value			
Situation as at 1 January 2018	**258.554.541**	**29.789.065**	**288.343.606**
Situation as at 31 December 2018	**250.467.096**	**27.494.158**	**277.961.253**

	Land and buildings	Other equipment and furniture	Total
Situation as at 1 January 2017	**388.840.864**	**61.843.875**	**450.684.739**
Increase	3.824.128	8.564.026	12.388.154
Decrease	-1.834.410	-3.464.630	-5.299.040
Situation as at 31 December 2017	**390.830.582**	**66.943.271**	**457.773.853**
Accumulated depreciation			
Situation as at 1 January 2017	**121.171.703**	**30.897.460**	**152.069.163**
Depreciation	-1.094.545	-3.459.845	-4.554.390
Additions	12.198.883	9.716.591	21.915.474
Situation as at 31 December 2017	**132.276.041**	**37.154.206**	**169.430.247**
Net book value			
Situation as at 1 January 2017	**267.669.161**	**30.946.415**	**298.615.576**
Situation as at 31 December 2017	**258.554.541**	**29.789.065**	**288.343.606**

4.17 Investment property

Situation as at 1 January 2018	**30.653.882**
Increase (acquisitions)	-
Increase (investment expenditure)	16.583
Decrease	-651.207
Situation as at 31 December 2018	**30.019.258**
Accumulated depreciation	
Situation as at 1 January 2018	**16.926.764**
Depreciation	-651.207
Additions	980.974
Situation as at 31 December 2018	**17.256.530**
Net book value	
Situation as at 1 January 2018	**13.727.120**
Situation as at 31 December 2018	**12.762.729**

Situation as at 1 January 2017	**30.364.639**
Increase (acquisitions)	-
Increase (investment expenditure)	452.881
Decrease	-163.638
Situation as at 31 December 2017	**30.653.882**
Accumulated depreciation	
Situation as at 1 January 2017	**16.053.586**
Depreciation	-153.229
Additions	1.026.407
Situation as at 31 December 2017	**16.926.764**
Net book value	
Situation as at 1 January 2017	**14.311.053**
Situation as at 31 December 2017	**13.727.120**

Rental income from rented investment property amounted to EUR 3.051.964 for the 2018 financial year, versus EUR 2.915.793 in the prior year. Maintenance costs related to investment property were EUR 157.737 in 2018, down from EUR 248.602 one year earlier.

The fair value of investment property stood at EUR 72.462.312 at year-end 2018, compared with EUR 70.638.093 at end-2017. This fair value measurement is categorised as Level 2 in the fair value hierarchy.

This fair value is estimated by an appraiser according to the following criteria:

- Geographical location of the buildings;
- General condition of the building;
- Use for residential or commercial purposes;
- Surface area of the object.

Investment properties are exclusively located on the national territory.

4.18 Intangible assets

Situation as at 1 January 2018	**41.051.244**
Increase	20.258.832
Decrease	-8.597.507
Situation as at 31 December 2018	**52.712.569**
Accumulated depreciation	
Situation as at 1 January 2018	**22.446.190**
Depreciation	-8.597.507
Additions	11.388.835
Situation as at 31 December 2018	**25.237.519**
Net book value	
Situation as at 1 January 2018	**18.605.053**
Situation as at 31 December 2018	**27.475.050**

Situation as at 1 January 2017	**38.506.254**
Increase	12.203.183
Decrease	-9.658.193
Situation as at 31 December 2017	**41.051.244**
Accumulated depreciation	
Situation as at 1 January 2017	**21.987.097**
Depreciation	-9.658.193
Additions	10.117.286
Situation as at 31 December 2017	**22.446.190**
Net book value	
Situation as at 1 January 2017	**16.519.156**
Situation as at 31 December 2017	**18.605.053**

The depreciation expense related to intangible assets is recognised under "Depreciation allowances for tangible and intangible assets" in the income statement.

4.19 Taxes: Tax assets and liabilities

Whereas current tax is a current tax liability, deferred taxes are the amounts of income taxes that may be payable in the future in respect of taxable temporary differences.

The Group posted a current tax liability of EUR 46.813.738 as at 31 December 2018 versus EUR 62.045.799 in the previous year.

As no tax law incorporating IFRS standards has been passed in Luxembourg, the Group calculates the tax liability payable based on the increase in net assets of the balance sheet items valued through the income statement.

As at 31 December 2018, the Group posted a deferred tax asset of EUR 144.428.889, and a deferred tax liability of EUR 142.152.770.

The table below gives a breakdown of the changes to deferred tax assets and liabilities, depending on whether the changes relate to items that are charged or credited to equity, or relate to items that are charged or credited to the income statement:

Headings	01/01/2018	Movements in equity	Movements in income statement	31/12/2018
Deferred tax assets	93.552.932	50.872.957	-	144.425.889
Deferred tax liabilities	-158.365.512	5.670.905	10.541.836	-142.152.770
Net deferred tax assets / liabilities	**-64.812.580**	**56.543.862**	**10.541.836**	**2.273.119**

Headings	01/01/2017	Movements in equity	Movements in income statement	31/12/2017
Deferred tax assets	104.323.210	-10.770.278	-	93.552.932
Deferred tax liabilities	-162.650.834	-8.202.097	12.487.419	-158.365.512
Net deferred tax assets / liabilities	**-58.327.624**	**-18.972.375**	**12.487.419**	**-64.812.580**

4.19.1 Tax assets

Headings	31/12/2017	31/12/2018
Deferred taxes	93.552.932	144.425.889
Tax assets	**93.552.932**	**144.425.889**

Breakdown of deferred tax assets according to origin:

Headings	31/12/2017	31/12/2018
Derivative financial instruments - application of fair value	252.722	126.129
Debt instruments - application of fair value	1.416.439	-
Equity instruments - application of fair value	2.383.009	3.998.803
Pension funds - actuarial gain or loss	89.500.762	96.764.277
Deferred tax assets due to FTA		43.536.679
Deferred tax assets	**93.552.932**	**144.425.889**

4.19.2 Tax liabilities

Headings	31/12/2017	31/12/2018
Current taxes	62.045.799	46.813.738
Income tax	*37.807.574*	*34.105.501*
Municipal business tax	*24.216.825*	*12.686.837*
Wealth tax	*21.400*	*21.400*
Deferred taxes	158.365.512	142.152.770
Tax liabilities	**220.411.311**	**188.966.508**

Breakdown of deferred tax liabilities according to origin:

Headings	31/12/2017	31/12/2018
Derivative financial instruments - application of fair value	1.106.737	862.420
Debt instruments - application of fair value	27.633.172	-
Equity instruments - application of fair value	6.404.677	791.698
Regulatory and other provisions	116.067.333	106.029.218
Pension funds - actuarial gain or loss	7.153.593	2.890.058
Deferred tax liabilities due to FTA		31.579.375
Deferred tax liabilities	**158.365.512**	**142.152.770**

4.20 Other assets

Headings	31/12/2017	31/12/2018
Operational outstandings	5.540.552	12.280.871
Preferential or secured borrowers	4.884.175	1.672.453
Other	1.136.551	10.161
Total	**11.561.278**	**13.963.485**

4.21 Deposits at amortised cost – Credit institutions

Headings	31/12/2017			31/12/2018		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Inter-bank deposits	3.744.372.687	658.706.046	4.403.078.733	4.154.392.200	588.474.794	4.742.866.994
of which central bank deposits	*331.136.817*	*498.455.556*	*829.592.373*	*425.440.769*	*496.427.778*	*921.868.547*
Repurchase/Reverse repurchase agreements	372.945.142	-	372.945.142	97.978.071	-	97.978.071
Total	**4.117.317.828**	**658.706.046**	**4.776.023.875**	**4.252.370.271**	**588.474.794**	**4.840.845.065**

4.22 Deposits at amortised cost – Customers

Headings	31/12/2017			31/12/2018		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Private sector	**23.566.342.653**	**909.111.534**	**24.475.454.187**	**25.015.575.225**	**980.140.803**	**25.995.716.028**
- Demand deposit and notice accounts	*7.959.338.041*	-	*7.959.338.041*	*9.169.669.399*	-	*9.169.669.399*
- Time deposit accounts	*2.683.351.858*	*909.111.534*	*3.592.463.392*	*2.086.726.085*	*980.140.803*	*3.066.866.888*
- Savings	*12.880.228.127*	-	*12.880.228.127*	*13.759.179.740*	-	*13.759.179.740*
- Repurchase/Reverse repurchase agreements	*43.424.627*	-	*43.424.627*	-	-	-
Public sector	**6.371.497.600**	**630.181.643**	**7.001.679.243**	**4.829.161.993**	**1.052.271.028**	**5.881.433.022**
Total	**29.937.840.253**	**1.539.293.177**	**31.477.133.430**	**29.844.737.218**	**2.032.411.831**	**31.877.149.050**

4.23 Financial liabilities designated at fair value through profit or loss

Headings	31/12/2017			31/12/2018		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Issues	-	146.853.974	146.853.974	-	151.566.706	151.566.706
Total	**-**	**146.853.974**	**146.853.974**	**-**	**151.566.706**	**151.566.706**
Unrealised profit/loss at the reporting date	-	-4.531.301	-4.531.301	-	-1.918.958	-1.918.958

This item includes financial instruments which, depending on their characteristics, incorporate derivative components that are not directly related and are therefore not eligible for measurement at fair value through the revaluation reserve.

Breakdown of changes in carrying amount:

Issues	2017	2018
Situation as at 1 January	**148.612.880**	**146.853.974**
Issues	-	-
Repayments/redemptions	-	-
Realised profit/(loss)	-	-
Pro-rata interest	1.441.366	1.840.508
Unrealised valuations	-2.851.850	2.612.343
Exchange gain or loss	-348.422	259.880
Situation as at 31 December	**146.853.974**	**151.566.706**

4.24 Issuance of debt securities

Headings	31/12/2017			31/12/2018		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Certificates of deposit	66.852.448	88.475.111	155.327.560	41.625.872	59.022.613	100.648.485
Commercial paper	3.101.120.005	-	3.101.120.005	3.098.167.240	-	3.098.167.240
Medium Term Notes and other securities issued	9.053.921	447.515.567	456.569.488	-	447.778.704	447.778.704
Total	**3.177.026.374**	**535.990.679**	**3.713.017.053**	**3.139.793.112**	**506.801.317**	**3.646.594.429**
of which:						
- subordinated notes	-	*100.971.040*	*100.971.040*	-	*100.483.038*	*100.483.038*

"Medium Term Notes" issues are exclusively listed on the Luxembourg Stock Exchange.

Since 2015, certificates of deposit are no longer marketed and are a run-off activity.

Breakdown of changes in carrying amount of medium-term notes:

Issues	2017	2018
Situation on 1 January	**490.687.756**	**456.569.488**
Issues	-	-
Repayments/redemptions	-20.765.321	-9.016.500
Realised profit/(loss)	-	43.247
Pro-rata interest	-330.734	133.661
Unrealised valuations	-4.376.080	3.636.622
Exchange gain or loss	-8.646.133	-3.587.814
Situation on 31 December	**456.569.488**	**447.778.704**

Breakdown of subordinated loans as at 31 December 2018

Description	Rate	Issue currency	Nominal amount issued - EUR	Assimilated portion - EUR	Non-assimilated portion - EUR
Loan 2000-2020	0.054	EUR	8.600.000	2.801.916	5.798.084
Loan 2001-2021	0.350	EUR	11.000.000	4.553.593	6.446.407
Loan 2001-2021	0.350	EUR	30.000.000	12.418.891	17.581.109
Loan 2002-2022	0.400	EUR	50.000.000	38.850.103	11.149.897
Total			**99.600.000**	**58.624.504**	**40.975.496**

The interest expense on subordinated notes stood at EUR 166.589 as at 31 December 2018, compared with EUR 166.589 as at 31 December 2017.

4.25 Provisions

This item comprises two main types of provisions: provisions to be established under IAS 37 and provisions under IFRS 9 on Group commitments.

Changes during the financial year:

	Provisions			
2017	Risks and charges	Time savings account	IAS 39/IFRS 9	Total
Situation as at 1 January	**3.523.514**	-	**1.359.720**	**4.883.233**
Additions	-	-	25.652	25.652
Reversals	-924.162	-	-390.260	-1.314.422
Application	-	-	-	-
Situation as at 31 December	**2.599.352**	-	**995.111**	**3.594.463**
2018				
FTA impact	-	-	14.201.029	14.201.029
Situation as at 1 January	**2.599.352**	-	**15.196.140**	**17.795.492**
Additions	200.000	-	8.077.352	8.277.352
Reversals	-82.823	-	-10.156.420	-10.239.243
Application	-421.654	-	1.291	-420.363
Expense included in personnel expenses	-	6.411.941	-	6.411.941
Situation as at 31 December	**2.294.875**	**6.411.941**	**13.118.363**	**21.825.179**

The provisions established under IAS 37 are provisions for risks and charges and include provisions for risks related to disputes and provisions for charges on personnel costs not covered by other standards.

Details IFRS 9 provisioning for 2018:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2018	**10.862.265**	**3.262.743**	**1.071.132**	**15.196.140**
Stage transfers	**613.519**	**-547.038**	**-66.482**	-
Transfer from Stage 1	-97.443	96.457	986	-
Transfer from Stage 2	681.525	-703.348	21.823	-
Transfer from Stage 3	29.438	59.853	-89.291	-
Position as at 31 December 2018 before changes	**11.475.784**	**2.715.705**	**1.004.650**	**15.196.140**
Changes	**-1.229.572**	**-646.915**	**-201.290**	**-2.077.777**
Increase due to acquisition and origination	7.486.993	949.570	959.315	9.395.879
Decrease due to repayment	-2.496.271	-1.329.210	-193.394	-4.018.874
Change related to credit risk	-6.221.587	-252.465	-967.211	-7.441.262
Other changes	-	-14.810	-	-14.810
Exchange gain or loss	1.292	-1	-	1.290
Situation as at 31 December 2018	**10.246.212**	**2.068.790**	**803.361**	**13.118.363**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	*-33.311.002*	*33.156.478*	*154.525*	-
Transfer from Stage 2	*45.898.530*	*-46.170.098*	*271.568*	-
Transfer from Stage 3	*137.459*	*251.909*	*-389.368*	-

Outstanding amounts covered by provisions at 31/12/2018	Stage 1	Stage 2	Stage 3	Total
Outstanding amounts	6.080.329.241	175.939.243	7.541.887	6.263.810.371

4.26 Other liabilities

Headings	31/12/2017	31/12/2018
Operational outstandings	11.058.567	57.279.105
Preferential or secured creditors	20.936.412	23.069.643
Other	3.428.591	3.410.652
Total	**35.423.570**	**83.759.400**

4.27 Pension funds - Defined-benefit pension plan

Main estimates used to determine pension commitments:

Variables	31/12/2017	31/12/2018
Discount rate for active employees	1,80%	1,80%
Discount rate for beneficiaries	1,30%	1,45%
Salary increases (including indexation)	3,25%	3,25%
Pension increases (including indexation)	2,25%	2,25%
Induced yield	1,53%	1,61%

The induced yield of 1,61% in 2018 corresponds to the weighted average of the discount rates for working people and for annuitants as fixed at the end of the 2018 financial year.

Net pension fund allowance entered under "Personnel expenses" in the income statement:

Components	31/12/2017	31/12/2018
Current service cost	10.765.721	11.092.320
Interest cost	8.957.040	9.902.453
Induced yield	-5.752.296	-6.840.037
Total	**13.970.465**	**14.154.736**

Pension commitments:

	2017	2018
Commitments as at 1 January	**641.426.257**	**646.114.109**
Current service cost	10.765.721	11.092.320
Interest cost	8.957.040	9.902.453
Benefits paid	-11.948.051	-12.585.339
Actuarial gains or losses	-3.086.860	27.925.854
Commitments as at 31 December	**646.114.109**	**682.449.398**

Civil servants' pension payments are initially made directly by the State to civil servants. The Group only recognises the payments when the amounts are repaid to the State. Hence, "Benefits paid" amounting to EUR 12.585.339 include the repayments to the Luxembourg State of civil servants' pensions in respect of the 2017 financial year.

Breakdown of actuarial gains and losses:

	2017	2018
Actuarial gains and losses arising from changes in actuarial assumptions	15.738.949	-8.798.320
- financial assumptions	*15.738.949*	*-8.798.320*
- demographic assumptions	-	-
Actuarial gains and losses arising from experience adjustments	-18.825.809	36.724.174
Total actuarial gains and losses:	**-3.086.860**	**27.925.854**

Sensitivity analysis of pension commitments:

Impact of changes in actuarial assumptions on the pension commitment as at 31/12/2018	**decrease**	**increase**
Change in average actuarial rate (-/+ 50 bps)	80.452.505	-68.451.363
Change in wage increase rate (-/+ 50 bps)	-67.624.350	82.473.437
Change in pension increase rate (-/+ 25 bps)	-28.927.498	30.814.629
Change in mortality tables (-/+ 1 years)	22.317.515	-22.048.586
Cumulative effect:	**6.218.172**	**22.788.117**

Impact of changes in actuarial assumptions on the pension commitment as at 31/12/2017	**decrease**	**increase**
Change in average actuarial rate (-/+ 50 bps)	71.835.195	-69.771.154
Change in wage increase rate (-/+ 50 bps)	-72.280.835	79.827.271
Change in pension increase rate (-/+ 25 bps)	-32.051.964	24.455.132
Change in mortality tables (-/+ 1 years)	16.716.232	-25.852.118
Cumulative effect:	**-15.781.372**	**8.659.131**

Maturity analysis of pension commitments:

	31/12/2017	31/12/2018
Average duration of the pension commitment	**22.12 years**	**22.11 years**
Analysis of maturities of commitments to be paid	**646.114.109**	**682.449.398**
pensions outstanding for the year	7.079.965	7.252.938
commitments to be paid within 12 months	13.016.230	13.605.769
commitments to be paid in 1-3 years	27.276.742	28.681.729
commitments to be paid in 3-6 years	43.788.188	45.919.427
commitments to be paid in 6-11 years	78.587.851	84.031.158
commitments to be paid in 11-16 years	83.940.413	89.416.347
commitments to be paid after 16 years	392.424.719	413.542.030

Pension plan assets:

	2017	2018
Assets as at 1 January	**411.930.026**	**446.297.938**
Benefits paid	-11.948.051	-12.585.339
Contribution	32.974.305	33.002.681
Induced yield	5.752.296	6.840.037
Fair value gain / loss	7.589.361	-16.391.907
Assets as at 31 December	**446.297.938**	**457.163.411**

In 2018, the Group's parent company made an annual contribution of EUR 9.002.681 and an extraordinary contribution of EUR 24.000.000 compared with an annual contribution of EUR 8.974.305 and an extraordinary contribution of EUR 24.000.000 in the previous year. The extraordinary contributions for 2017 and 2018 were used to offset the impact of the switch from the IGSS mortality tables to DAV2004R.

Pension plan investments:

2018	Credit institutions	Public sector	Corporate	Total
Fixed-income securities	133.085.476	153.757.048	28.370.984	315.213.508
Variable-income securities	-	-	47.006.214	47.006.214
Real estate investment	-	-	10.802.640	10.802.640
Other assets (primarily deposits)	84.141.048	-	-	84.141.048
Total	**217.226.524**	**153.757.048**	**86.179.839**	**457.163.411**

2017	Credit institutions	Public sector	Corporate	Total
Fixed-income securities	104.379.281	137.701.521	28.646.518	270.727.320
Variable-income securities	-	-	124.759.394	124.759.394
Real estate investment	-	-	10.000.000	10.000.000
Other assets (primarily deposits)	40.811.224	-	-	40.811.224
Total	**145.190.505**	**137.701.521**	**163.405.912**	**446.297.938**

Net pension commitments:

	2016	2017	2018
Pension commitments	641.426.257	646.114.109	682.449.398
Plan assets measured at fair value	-411.930.026	-446.297.938	-457.163.411
Unfinanced commitments	**229.496.231**	**199.816.171**	**225.285.987**

Stock of actuarial gains and losses:

Stock as at 1 January 2018	**252.374.821**
2018 net change	44.317.761
Stock as at 31 December 2018	**296.692.583**
Stock as at 1 January 2017	**263.051.042**
2017 net change	-10.676.221
Stock as at 31 December 2017	**252.374.821**

The Group's parent company's estimated total contribution to the pension fund for 2019 is EUR 12.565.225.

4.28 Related-party transactions

The related parties of the Group's parent company are the governmental institutions and the Group's key management personnel.

All transactions with related parties are completed under market conditions.

4.28.1 Government institutions

The Group's parent company, established by the law of 21 February 1856 and governed by the organic law of 24 March 1989, is a self-governing public law institution endowed with legal personality. Ultimate responsibility for the institution lies with the Government Minister with responsibility for the Treasury.

Therefore, the Luxembourg Government controls the Group and, as a result, must comply with the requirements of IAS 24.

The Group makes the following disclosures concerning its commercial relationship with the Luxembourg State and other governmental institutions.

ASSETS	31/12/2017	31/12/2018
Loans and advances at amortised cost	2.529.698.402	2.310.327.576
Available-for-sale securities – Fixed-income securities	608.472.182	
Fixed-income securities recognised at amortised cost		565.350.469
Other	5.403.717	4.237.210
TOTAL ASSETS	**3.143.574.301**	**2.879.915.255**

LIABILITIES	31/12/2017	31/12/2018
Deposits at amortised cost	5.516.820.332	4.911.514.610
TOTAL LIABILITIES	**5.516.820.332**	**4.911.514.610**

4.28.2 Compensation paid to the members of the management and administrative bodies

Compensation paid to the members of the governing bodies of the Group's parent company breaks down as follows:

	31/12/2017	31/12/2018
Board of Directors (9 members)	361.500	318.750
Executive Board (5 members)	1.069.551	1.081.756
Total	**1.431.051**	**1.400.506**

4.28.3 Loans and advances granted to members of the Bank's management and administrative bodies

Loans and advances granted to members of the Bank's management and administrative bodies are as follows:

	31/12/2017	31/12/2018
Board of Directors (9 members)	3.026.616	2.268.788
Executive Board (5 members)	630.501	219.750
Total	**3.657.117**	**2.488.538**

4.29 Statutory Auditor's fees

	2017	2018
Statutory audit of the company and consolidated annual financial statements	600.375	557.126
Other audit services	188.360	146.560
Tax services	7.800	-
Other	105.312	-
Total	**901.847**	**703.686**

The amounts included in the above item are exclusive of VAT.

4.30 Direct fees and contributions related to the European Banking Union

Headings	2017	2018
European Central Bank supervision charges	1.118.786	1.306.993
CSSF supervision charges	133.500	517.000
Single Resolution Board charges	165.221	355.068
Total	**1.417.507**	**2.179.061**
FGDL contribution	23.703.211	28.750.366
FRL contribution	9.201.928	11.930.654
Total	**32.905.139**	**40.681.020**

4.31 Off-balance sheet items

Type of guarantees issued

Headings	31/12/2017	31/12/2018
Completion bonds	397.360.536	423.220.707
Letters of credit	100.149.572	82.986.242
Counter-guarantees	371.897.027	379.500.912
Other	26.905.787	5.136.715
Total	**896.312.923**	**890.844.576**

Commitments

Headings	31/12/2017	31/12/2018
Amounts subscribed and unpaid on securities, equity interests and shares in affiliated companies	7.057.223	6.950.482
Undrawn confirmed credits	5.766.634.921	5.351.527.190
Financing	*3.012.255.513*	*2.782.178.307*
Current accounts	*1.861.926.429*	*1.870.832.084*
Money market contracts	*423.756.863*	*218.340.611*
Other	*468.696.115*	*480.176.187*
Documentary credits	13.315.287	13.412.664
Total	**5.787.007.431**	**5.371.890.335**

Management of third-party assets

The Group provides management and representation services to third parties, particularly wealth management services, custody and administration of securities, hire of safe deposit boxes, fiduciary representation and agent functions.

5 NOTES TO THE INCOME STATEMENT [4]
(in euros)

5.1 Interest income

Interest received and similar income	2017	2018
Assets repayable on demand	-	-
Financial assets held for trading	187.290.954	244.227.468
Financial assets designated at fair value through profit or loss	1.968.464	
Financial assets mandatorily measured at fair value through profit or loss		7.006.682
Available-for-sale financial assets	160.418.151	
Fixed-income securities recognised at amortised cost		171.919.599
Receivables at amortised cost	392.228.949	396.175.388
Investments held to maturity at amortised cost	47.633.573	
Derivatives - Hedge accounting, interest rate risk	75.846.485	73.413.967
Other assets	17.348.338	18.581.021
Total	**882.734.914**	**911.324.125**

Interest paid and similar expenses	2017	2018
Financial liabilities held for trading	-40.259.691	-56.851.066
Financial liabilities designated at fair value through profit or loss	-2.311.007	-2.704.980
Liabilities at amortised cost - Deposits	-111.205.632	-133.464.137
Liabilities at amortised cost - Debt certificates	-61.887.289	-84.438.873
Liabilities at amortised cost - Subordinated loans	-125.911	-103.115
Derivatives - Hedge accounting, interest rate risk	-288.640.691	-263.575.311
Other liabilities	-14.693.116	-13.479.505
Total	**-519.123.337**	**-554.616.987**

Interest income	363.611.577	356.707.138
Total interest received and similar income not recognised at fair value through the income statement	695.443.960	667.096.657
Total interest paid and similar expenses not recognised at fair value through the income statement	-478.863.646	-497.765.921
Interest received on liability instruments	*16.032.705*	*16.649.051*
Interest paid on asset instruments	*-31.307.082*	*-31.168.852*

[4] Minor differences between the figures in the notes to the annual financial statements and the figures in the different annual statements are rounding differences only

5.2 Income from variable-income securities

Headings	2017	2018
Available-for-sale financial assets	47.388.545	
Variable-income securities measured at fair value through the revaluation reserve |		31.356.636
Income from variable-income securities	**47.388.545**	**31.356.636**

5.3 Fee and commission income

Headings	2017	2018
Loan activities	47.179.894	49.002.267
Asset management	36.516.413	39.484.972
Investment fund activities	52.589.430	51.657.209
Demand deposit accounts and related activities	34.550.386	35.997.923
Insurance premiums	4.816.223	3.040.679
Other (*)	6.072.862	8.084.745
Total commissions received	**181.725.208**	**187.267.795**
Loan activities	-3.208.543	-3.834.660
Asset management	-17.387.491	-17.305.377
Investment fund activities	-11.066.088	-10.542.731
Demand deposit accounts and related activities	-7.135.586	-7.343.949
Other (*)	-1.674.385	-2.435.576
Total commissions paid	**-40.472.093**	**-41.462.293**
Total commissions	**141.253.115**	**145.805.502**

(*) mostly fees on derivative financial instruments.

5.4 Income from financial instruments not recognised at fair value through profit or loss

Headings	2017	2018
Available-for-sale financial assets	24.734.172	
Fixed-income securities recognised at amortised cost		-60.624
Variable-income securities recognised at fair value through the revaluation reserve		246.943
Loans and advances at amortised cost	-322.327	145.510
Financial liabilities at amortised cost	-	6.077
Total	**24.411.845**	**337.906**

The amount in "Available-for-sale financial instruments" for 2017 is explained primarily by the sale of units in SES S.A.

5.5 Income from financial instruments held for trading

Headings	2017	2018
Equity instruments and related derivatives	3.621.175	4.393.382
Foreign exchange instruments and related derivatives	532.928	-2.374.974
Interest rate instruments and related derivatives	5.506.547	3.771.321
Credit derivatives	-	-
Total	**9.660.650**	**5.789.730**

5.6 Income from financial instruments designated at fair value through profit or loss

Headings	2017	2018
Financial assets designated at fair value through profit or loss	1.988.599	
Financial liabilities designated at fair value through profit or loss	2.851.850	-2.612.343
Total	**4.840.448**	**-2.612.343**

5.7 Income from financial instruments mandatorily measured at fair value through profit or loss

Headings	2017	2018
Fixed-income securities		-4.756.615
UCI units		-8.723.674
Loans and advances		114.118
Total		**-13.366.171**

5.8 Income from hedging transactions

Headings	2017	2018
Fair value hedge		
Debt instruments (assets) hedged by derivatives	-224.794	-165.703
Debt issues hedged by derivatives	19.083	10.647
Loans hedged by derivatives	2.825.600	2.742.392
Total	**2.619.890**	**2.587.336**
Value adjustment on hedged instruments	-199.832.026	-15.314.194
Value adjustment on hedging instruments	202.451.916	17.901.531
Total	**2.619.890**	**2.587.336**

Market risk hedging operations are highly efficient. Loans are hedged by derivative financial instruments in the form of micro-hedging or macro-hedging transactions, in accordance with IAS 39.

Information on the effectiveness rate is included in Note 4.14.

5.9 Other net operating income

Headings	2017	2018
Other operating income	20.383.067	14.141.187
Other operating expenditure	-36.822.128	-42.727.204
Other net operating income	**-16.439.061**	**-28.586.017**

"Other operating income and expenditure" mainly include:

- the rent from property rented and miscellaneous advances from tenants,
- VAT repayments relating to previous financial years,
- income on amortised loans,
- the share of annual contributions to the FRL and FGDL.

5.10 Personnel expenses

Headings	2017	2018
Compensation	171.173.667	184.246.569
Social security charges	6.601.540	7.306.842
Pensions and similar expenses	13.345.027	13.802.204
Pension fund expense	13.970.465	14.154.736
Other personnel expenses	4.751.955	4.986.582
Total	**209.842.654**	**224.496.933**

5.11 Other administrative expenses

Headings	2017	2018
Expenses related to property and furniture	24.522.491	22.588.880
Rents and maintenance of software	21.957.087	21.971.612
Operating expenditure related to the banking business	30.203.771	31.063.918
Other	12.143.647	11.104.935
Total	**88.826.996**	**86.729.345**

5.12 Depreciation allowances for tangible assets

- Depreciation

Headings	2017	2018
Depreciation - buildings	12.198.884	12.291.884
Depreciation - equipment and furniture	9.716.590	10.183.698
Depreciation of tangible assets	**21.915.474**	**22.475.582**

- Impairment

No impairment of tangible assets according to IAS 36 was recognised by the Group in 2017 or 2018.

5.13 Depreciation allowances for investment properties

- Depreciation

Headings	2017	2018
Depreciation	1.026.408	980.974
Depreciation of tangible assets - investment	**1.026.408**	**980.974**

- **Impairment**

No impairment of investment properties according to IAS 36 was recognised by the Group in 2017 or 2018.

5.14 Depreciation allowances for intangible assets

- **Depreciation**

Headings	2017	2018
Depreciation	10.117.286	11.388.835
Depreciation of intangible assets	**10.117.286**	**11.388.835**

- **Impairment**

No impairment of intangible assets according to IAS 36 was recognised by the Group in 2017 or 2018.

5.15 Net allowances for impairment of credit risks

	2017			2018		
	Additions	Reversals	Total	Additions	Reversals	Total
Available-for-sale securities	-	10.755.386	10.755.386			
Held-to-maturity securities	-	-	-			
Fixed-income securities recognised at amortised cost				-3.185.937	7.121.228	3.935.291
Loans and advances	-12.290.699	17.309.678	5.018.979	-27.782.361	44.082.725	16.300.364
of which individual impairment	*-10.785.246*	*16.220.176*	*5.434.930*	-27.782.361	44.082.725	*16.300.364*
of which collective impairment	*-1.505.453*	*1.089.503*	*-415.951*			
	-12.290.699	**28.065.065**	**15.774.365**	**-30.968.298**	**51.203.953**	**20.235.654**

Interest on financial assets impaired in	2017	2018
Interest on impaired available-for-sale financial assets	200.439	
Interest on fixed-income securities recognised at amortised cost | Impaired		3.577
Interest on impaired loans and advances	5.289.538	1.959.960
Total	**5.489.977**	**1.963.536**

5.16 Provisions and reversal of provisions

Headings	2017	2018
Provisions	-25.652	-8.789.938
Reversal of provisions	1.314.423	10.751.826
Net allowances for provisions	**1.288.771**	**1.961.888**

5.17 Tax expense

Headings	2017	2018
Tax on income from continuing operations	63.482.573	49.096.004
Deferred taxes	-12.487.419	-10.541.836
Tax on profit/(loss) for the period	**50.995.154**	**38.554.168**

The standard tax rate applicable in Luxembourg was 26,01% as at 31 December 2018 and 27,08% as at 31 December 2017. The Group's effective tax rate was 19,32% and 16,62% in 2018 and 2017 respectively, given the differences between the Luxembourg tax base and the accounting principles for annual consolidated financial statements in force in Luxembourg.

The difference between these two rates may be analysed as follows:

	2017	2018
Income before tax	306.885.136	199.532.544
Tax rate	27.08%	26.01%
Theoretical tax at the standard rate	83.104.495	51.898.415
Tax impact of non-deductible expenses	123.689	104.154
Tax impact of non-taxable income	-18.664.929	-13.671.896
Share in the income of equity-accounted associates	-9.357.337	-3.235.700
Tax rebates and reductions	-321.642	1.414.497
Change in deferred tax rate	-4.517.147	-
Tax refund/payment from previous financial years	-1.424.361	827.312
Other	2.052.386	1.217.386
Tax on profit/(loss) for the period	**50.995.154**	**38.554.168**

The tax impact of non-taxable income largely stems from the collection of dividends from the Group's strategic shareholdings in resident companies, fully subject to tax, which enable it to apply the principle of parent companies and subsidiaries in accordance with Article 166 LIR (Income Tax Act) in order to avoid double economic taxation of such income. Excluding this non-taxable income for the Group, the Group tax rate would be 25,76% in 2018.

5.18 Return on assets

In accordance with Article 38-4 of the Law on the Financial Sector, the Group reported its return on assets, which stood at 0,35% for financial year 2018 versus 0,56% in the prior year.

6 RISK MANAGEMENT[5]

6.1 General rules for managing financial risk

Traditionally, the Group's parent company has pursued a prudent and conservative risk management policy.
The Group's parent company has thus opted for a "defensive" risk profile, defined in the Risk Appetite Framework ("RAF"). The RAF includes indicators of the Group's major risk categories and enables the Executive Committee and the Board of Directors to regularly monitor the Group's parent company's overall situation in detail. Risk appetite is defined as the level of risk that the Group's parent company is willing and able to bear in the pursuit of its strategic objectives. The levels of risk to which the Group's parent company is exposed are measured through a set of strategic indicators, operational metrics, and macroeconomic indicators. Risk appetite is expressed through the surveillance levels set by the Group's parent company for these indicators.

Risk appetite is transposed into a set of limits intended to manage and control the Group's various risks. These limits are indicated in the Group's Limit Handbook.

6.1.1 Role of the Board of Directors

The Board of Directors defines the general policy of the Group's parent company in accordance with the Organic Law of 1989 and the applicable national and European legal texts and accordingly approves the overall economic strategy of the Group's parent company and its main policies, proposed by the Executive Committee, within the applicable legal and regulatory framework, while also taking into account the Group's solvency and long-term financial interests.

In this context, the Board of Directors defines the overall strategy of the Group's parent company, on the basis of proposals from the Executive Committee, and oversees the consistent implementation of the Group's strategic objectives, related administrative and functional structure and risk strategy.

The Group has established the Internal Capital Adequacy Assessment Process (ICAAP) and the Internal Liquidity Adequacy Assessment Process (ILAAP) to make a comprehensive assessment of all

[5] Minor differences between the figures in the notes to the annual financial statements and the figures in the different annual statements are rounding differences only.

risks to which it could be exposed. For each risk identified, the Group estimates the materiality and probability of occurrence, and assesses its resources for the management of the risk identified.

This risk assessment process results in an annual statement by the management body in which it communicates its assessment of the institution's capital adequacy.

6.1.2 Role of the Audit Committee

The Audit Committee's mission is to advise the Board of Directors in its supervisory function and thus prepare the decisions to be adopted by the Board. In particular, it assists the Board in the areas of financial reporting, internal control including internal audit, and control exercised by the statutory auditor.

The Audit Committee thus facilitates the implementation of a sound internal governance framework.

The Audit Committee consists of four members of the Board of Directors.

The Chief Executive Officer, Deputy Chief Executive Officer, Chief Risk Officer and Chief Internal Auditor are invited to all meetings of the Audit Committee. The audit firm responsible for the statutory audit of the Group parent company's financial statements may be invited to Audit Committee meetings at the request of the Audit Committee.

6.1.3 Role of the Risk Committee

The Risk Committee's mission is to advise the Board of Directors in its supervisory function and thus prepare the decisions to be adopted by the Board of Directors. It provides support in the specific areas relating to the multiple aspects of risks incurred by the Group's parent company, inherent in executing its business model, inherent in the strategic objectives of the Group's parent company, and inherent in legal, regulatory, technological changes and changes in the social, commercial and competitive environment in which the Group operates.

It thus facilitates the implementation of a sound internal governance framework.

It consists of five members of the Board of Directors, including a majority of independent members of the Board of Directors within the meaning of the applicable laws and regulations.

The Chief Executive Officer, Deputy Chief Executive Officer, Chief Risk Officer and Chief Internal Auditor are invited to all meetings of the Risk Management Committee.

6.1.4 Role of the Appointment and Compensation Committee

The Appointment and Compensation Committee's mission is to advise the Board of Directors in its supervisory function and thus prepare the decisions to be adopted by the Board of Directors. It provides support in specific areas relating in particular to certain aspects of the compensation and appointment of members of the Bank's management bodies, the Board of Directors and the Executive Committee and those responsible for internal control functions.

It thus facilitates the implementation of a sound internal governance framework.

6.1.5 Role of the Executive Committee

Pursuant to the Organic Law of 1989 and in accordance with the general policy of the Group's parent company and the Group's overall economic strategy defined by the Board of Directors on a proposal from the Committee, all administrative acts and measures necessary or relevant to the Bank's purpose fall within the responsibility of the Executive Committee.

The Executive Committee is responsible for the effective, sound and prudent management of activities and the risks inherent to them. This management is executed by respecting the strategies and guiding principles established by the Board of Directors and the applicable European and national laws and regulations. The Executive Committee thus makes concrete proposals to the Board of Directors enabling it to define the overall risk strategy, including the Group's risk appetite and risk management framework.

6.1.6 Role of the Risk Management Committee

The Risk Management Committee consists of members of the Executive Committee as well as certain department heads and vice presidents of the Group's parent company and deals with topics related to the identification, measurement, management, and reporting of risks, whether with regard to pillar 1 risks, such as credit, market, and operational risks, or pillar 2 risks, such as liquidity, compliance, and reputational risks. The proposals of the Risk Management Committee are subject to validation by the Executive Committee. The Risk Management Committee is assisted by a Risk Subcommittee, which meets on a monthly basis.

6.1.7 Responsibilities of the Risk Management function

From an organisational point of view, the risk control function is delegated to the Risk Management unit. This function reports directly to the Executive Committee and operates independently from all commercial activities within the Bank. The Risk Management unit is therefore part of the second line of defence.
The Group's parent company has a set of risk monitoring committees made up of the heads of various units at the operational level of the Group's parent company.

6.1.8 Responsibilities of the Compliance function

Compliance risk – also called non-conformity risk – generally refers to the risk of loss stemming from activities not carried out in accordance with current standards and regulations.

The Compliance function is part of the second line of defence with the Internal Audit and the Risk Management. It reports directly to the Executive Committee. The areas and responsibilities of the Compliance function are mainly:

- the fight against money laundering and terrorist financing;
- the prevention of market abuse and the integrity of financial instrument markets;
- the protection of the interests of customers and investors;
- the application of regulations on the protection of personal data;
- the prevention and management of conflicts of interests;
- the identification and monitoring of the standards to which the Bank is subject in the course of its activities.

In addition to the Compliance department, the Compliance function also consists of the Compliance Committee and the Acceptance Committee. The Compliance Committee is responsible for cross-business compliance issues affecting several units/activities. The Acceptance Committee is responsible for starting new business relationships and ending others for various reasons.

6.1.9 Responsibilities of the Internal Audit function

The "Internal Audit" function is responsible for periodically assessing the proper functioning and adequacy of the Group's parent company's internal control system.

The objectives are the following:

- preserve the assets of Banque et Caisse d'Epargne de l'Etat, Luxembourg;
- promote the efficiency and effectiveness of the implemented resources in order to ensure the quality of services;
- ensure the protection, integrity, reliability, and rapid dissemination of operational and financial information;
- ensure the correct application of internal procedures, instructions, Luxembourg's laws and regulations, as well as the regulator's prudential requirements;
- ensure compliance with the objectives set by the decision-making bodies of Banque et Caisse d'Epargne de l'Etat, Luxembourg;
- ensure the adequacy of the segregation of duties and the execution of operations;
- ensure compliance with the procedures governing the adequacy of capital and internal liquidity reserves;
- guarantee the adequacy of risk management;
- ensure the operation and effectiveness of the compliance and risk control functions.

Audit missions are carried out on the basis of a multi-year audit plan drawn up by the Internal Audit unit and approved by the Audit Committee.

The Chief Internal Auditor (CIA) guarantees application of the international standards of the French institute of internal auditors and compliance with the regulatory requirements by the Internal Audit unit.

6.1.10 Responsibilities of the Credit Analysis and Management department

From an organisational point of view, credit risk is managed by the Credit Analysis and Management department (DAG), a unit that operates independently from all commercial activities. It is responsible for:

- establishing a consistent framework to analyse credit risks, performing the analysis itself and continuously monitoring this risk,
- approving or rejecting applications from commercial entities and escalating cases to the Executive Committee that involve transactions whose outstanding amounts are above a limit set for processing by the Credit Committee, which reports to the Executive Committee.

The Credit Analysis unit therefore monitors both credit risk and counterparty risk. This involves analysing loan applications from all commercial entities and performing analyses in order to set ex-

ante limits. The new Credit Process Management unit (CPM) is responsible for the internal rating models. The head of the "Credit Analysis" unit is in charge of the Credit Analysis and Management department.

6.1.11 Systems for measuring and tracking limits

6.1.11.1 Credit risk

The Loans and Credit department continuously monitors the quality of all borrowers.

The credit quality of retail commitments is monitored on the basis of internal ratings that include a behavioural analysis. Wholesale records also have internal ratings, derived from appraiser models. Very often, these commitments also have external ratings. The analysis of the difference between the internal and external ratings is part of the monitoring.

The "Credit Process Management" (CPM) unit within the DAG department deals with cross-business operational topics relating to personal and business loans/credit facilities. The activity also encompasses regulatory aspects, optimisation of the credit process, as well as development and maintenance of internal ratings and grant scoring models.

The Loans and Credit Department reports to Senior Management on a continuous basis on changes in the quality of borrowers. The Risk Management function conducts a detailed quarterly analysis of the changes in credit quality with regard to the Bank's portfolios and submits the results to Senior Management.

The positions held by the trading room are subject to daily ex post monitoring to ensure compliance with the credit limits set by Senior Management. Traders have real-time access to these limits.

In addition to counterparty limits, the Group's parent company has set up a system of limits by sector and region to monitor concentration risk.

6.1.11.2 Market risk

Market risk is generally the risk of the Group suffering financial loss on the instruments it holds as a result of unfavourable developments in market parameters, such as interest rates, foreign exchange rates, share prices, etc.

The Group takes an integrated approach to managing interest rate risk for its entire banking book.

The Group thus implements a set of methods to assess and monitor interest rate risk:

- permanent calculation of the Basis Point Value (BPV) indicators for trading room and Asset Liability Management (ALM) positions exposed to interest rate risk. BPV is a simple and effective method of quantifying the market risk generated by small interest rate fluctuations for the positions held. Traders and ALM analysts are required to always operate within the BPVs set by Senior Management. Compliance with these limits is monitored by the "Risk Management" function.

- interest rate risk stress tests based on several market rate scenarios, which consist in assessing the impact of these scenarios on the economic value of the Bank's rate-risk-sensitive banking book positions (Economic Value of Equity).

- value-at-risk (VaR) for trading floor and ALM positions, to determine the amounts at risk with respect to the positions held by the Bank. Risk amounts are subject to limits set by Senior Management and supervised by the "Risk Management" function. VaR is a more sophisticated measurement tool than simpler indicators such as BPV, since it:
    - integrates correlations of changes in risk factors between positions held;
    - expresses the potential loss as a single amount that can be compared with the Group's equity;
    - quantifies the probability of the occurrence of the loss.

The VaR method is also used to manage the Group's equity portfolio with VaR and stop-loss limits.

The Group uses a set of absolute limits to manage foreign exchange risk. The foreign exchange position is monitored on an aggregated basis by traders in the Financial Markets (FIM) unit.

Mismatch risk is handled by the Asset Liability Management (ALM) Committee, composed of members of the Executive Committee, several commercial department heads, and the heads of the Loans and Credit, Risk Management, and Accounting and Securities departments. The ALM Committee is responsible for proposing the broad guidelines for interest rate risk management beyond two years and for setting the target ALM profitability. The proposals of the ALM Committee are subject to validation by the Executive Committee. The ALM Committee is assisted by an ALM Subcommittee, which meets monthly.

6.1.11.3 Counterparty risk stemming from derivative financial instrument transactions

The Group has negotiated International Swaps and Derivatives Association Inc. (ISDA) framework agreements including Credit Support Annexes (CSA) designed to limit counterparty risk on derivative financial instrument trades with a positive mark-to-market valuation. At end-2018, 63,25% of outstanding amounts of transactions on derivatives were covered by such agreements.

Alongside the ISDA-CSA framework agreements, the Group is making increasing use of central counterparties (CCPs) to limit counterparty risk. At end-2018, 24,17% of outstanding amounts of derivative transactions were liquidated through these CCPs.

6.1.11.4 Liquidity risk

Liquidity risk results from a problem in recognition of financial inflows and outflows on a specific date. The risk for a financial institution is that it may be unable to meet its payment obligations at a given point in time as a result of having insufficient liquid assets relative to its maturing liabilities. By virtue of its financial structure, the Group is generally in a position of excess liquidity.

The Group constantly monitors liquidity risk on the basis of maturities. including both very detailed reconciliation of cash inflows and outflows over a six-month horizon and a medium- and long-term assessment of structural funding requirements. Short-time financing needs in the main currencies are subject to specific limits.

The Group conducted the stress tests required by circular CSSF 09/403 in 2018 on at least a monthly basis to show that it would have sufficient liquid assets to cope with unexpected large-scale withdrawals over an extended period.

Under normal circumstances, the Group has stable and diversified liabilities, notably in the form of a very solid customer deposit base and Euro Commercial Paper (ECP), US Commercial Paper (USCP) and Euro Medium Term Note (EMTN) refinancing programmes, which ensure a comfortable liquidity position. Furthermore, due to its high-quality fixed-income securities portfolio, the Group would be able, if necessary, to access the repo market or participate in the ECB's money-market operations.

In the event of an urgent need for large amounts of liquidity, the Group's parent company has an intraday and overnight credit line with the Luxembourg Central Bank (BCL) secured by pledges of public sector bonds or other fixed-income securities. To this end, the Group aims to continually have a portfolio of a minimum of **EUR 3 billion** in fixed-income securities that can serve as a guarantee to the

BCL. As at 31 December 2018, this portfolio amounted to EUR 4 billion. At year-end 2018, the amount of the portfolio of assets eligible for refinancing with the BCL or usable on the interbank market exceeded EUR 10 billion.

Amended CSSF Circular 07/301, § II.1. "Risk identification" explicitly mentions the securitisation risk of which the credit institution is the originator or sponsor. Securitisation is one of the techniques used to manage liquidity, since it allows a bank to remove assets from the balance sheet to raise funds. The Group's parent company did not participate as initiator or sponsor in such a transaction during the 2018 financial year.

The Group's parent company is an indirect member of the CLS (Continuous-Linked Settlement) foreign exchange transaction settlement system. The overwhelming majority of foreign-exchange transactions are now handled by the CLS. Transaction date flows of overnight transactions are not processed through CLS. For these transactions, the settlement of initial flows, i.e. those that took place on the transaction date, is done in the conventional manner through correspondent banks. Maturity date flows for these same transactions are in principle settled through CLS.

Membership in the CLS system virtually eliminates counterparty risk (settlement risk) arising from foreign-exchange transactions through the "payment-versus-payment" principle. and reduces the Group's liquidity risk by netting transactions, which considerably reduces settlement volumes.

6.2 <u>Operational risk</u>

The Group defines operational risk as "the risk of losses resulting from an inadequacy or a failure of processes, personnel, internal systems, or external events, including legal risk", in accordance with article 4/point 52 of EU Regulation no. 575/2013 ("Capital Requirements Regulation", CRR).

6.2.1 Governance of operational risk management

To ensure effective management of operational risk at all levels, the Group has implemented governance based on the concept of the three lines of defence.

The roles and responsibilities of the control functions as well as the first line of defence are clearly highlighted in the Operational Risk Management Policy.

Operational risk management is supervised by various committees, including the Risk Management Committee at the Executive Committee level and the Risk Committee at the Board of Directors level.

The guidelines as well as the ultimate supervision and definition of operational risk appetite come directly from the Board of Directors, and implementation is ensured by the Executive Committee.

6.2.2 Operational risk management culture

Proper management of operational risk requires the promotion of a strong risk culture. The establishment of such a culture come from the Group's parent company's general management ("Tone from the Top").

The Group's parent company thus:
- ensures that employees respect the values and rules of professional ethics. The Group's parent company defines these standards in the staff code of conduct;
- ensures that employees have the necessary information and knowledge at the end of the training courses organised at regular intervals;
- ensures that the Group's parent company's employees do not have incentives to behave in a manner not in line with the Group's parent company's risk culture.

In addition, the Group's parent company applies several key principles:
- The principle of segregation of duties within the meaning of Article 71 of CSSF Circular 12/552: tasks and responsibilities are assigned so as to ensure that their performance by the same person is not incompatible in order to avoid potential conflicts of interest.
- Four eyes validation principle: actions requiring a decision, validation, or approval are taken according to the "four eyes" principle in order to avoid errors and irregularities.

6.2.3 Operational risk management approach

The operational risk management approach includes an assessment of risk levels to determine whether they are acceptable or tolerable and to assist in the decision-making and operational risk management process.

Operational risk monitoring is based on risk monitoring resources and tools as well as the reporting system.

The identification, analysis, assessment, and monitoring of operational risks within the Group's parent company constitute an integrated set of activities and methods that help the Group's parent company to measure and manage operational risk. The activities are implemented in a structured, diligent,

dynamic, and iterative manner. The choice whether to implement them results from a consistent approach and is based on exposure to the various risks incurred ("risk-based"). The various methods and practices of operational risk management can implement a dual dynamic: ex-ante (e.g. through Key Risk Indicators) or ex-post (e.g. through the collection of incident data).
The various information is used in the determination of the economic capital allocation performed as part of the Internal Capital Adequacy Assessment Process (ICAAP). Regarding the calculation of regulatory capital requirements, the Group adopts the standard approach.

Process and control improvements are actions taken to strengthen the control environment and therefore implement measures to reduce the operational risks inherent in the processes. A treatment measure may be initiated by the first line of defence as part of its responsibility for day-to-day management of inherent risks. A treatment measure may also be initiated following a decision of Senior Management on the treatment of the risk (accept, reduce, avoid, transfer).
The Group's parent company ensures that it has solid continuity plans, in particular the Business Continuity Plan (BCP), which aims to ensure the continuity of critical activities in the event of a major operational incident (involving property, computers, etc.), and the Disaster Recovery Plan (DRP), which aims to ensure the continued operation of critical information systems, supporting the critical processes of the BCP or their timely recovery in the event of a major IT incident.

6.3 Exposure to credit and counterparty risk

6.3.1 Objectives and management of credit and counterparty risk

Each Group commitment giving rise to a credit risk is subject to prior analysis by the Loans and Credit department.

For loans granted to the domestic economy recognised in the balance sheet under "Loans and advances at amortised cost - Customers", the decision-making structure is hierarchically organised into a number of credit committees, depending on the customer's overall outstanding amount. From a specified threshold, cases must be decided on by the Group's Executive Committee. The portfolio structures consist of residential mortgage loans for over half of the outstanding amount. Credit risk relating to residential mortgage loans is covered by the process of assessing customers' ability to repay loans and the existence of actual guarantees. The Group's parent company follows rigorous procedures for analysing loan applications and obtaining the related collateral for corporate loans and advances. The methodology put in place under the Basel regulation allows the Group to continuously monitor credit risk trends across all portfolios.

The Group did not change its risk management policy in the 2018 financial year.

For interbank markets and international loans, contracts are recognised in the balance sheet under "Loans and advances at amortised cost - Credit institutions", "Loans and advances at amortised cost - Customers", "Fixed-income securities recognised at amortised cost" and "Financial assets mandatorily measured at fair value through profit or loss"; a large majority of counterparties consist of banking and financial institutions. Internal ratings are applied to banking counterparties using a combination of quantitative and qualitative analyses. The quantitative component is based on ratios that best describe the counterparty's profitability, level of capital, liquidity and the quality of its assets, while the qualitative component is based on the analyst's own assessment of non-financial factors such as market share, quality of management and external ratings. The Group pursued its prudent investment policy in 2018, resulting in:

- a large proportion of investments in covered bonds, which offer more security than senior unsecured bonds,
- a concentration in investments in debt guaranteed by the European Union or some of its member States.

With regard to international loans to non-financial entities recognised in the balance sheet under "Loans and advances at amortised cost - Customers", "Fixed-income securities measured at amortised cost" and "Financial assets mandatorily measured at fair value through profit or loss", priority is given to commitments in OECD countries rated as at least Investment Grade. Like all the Group's other counterparties, these are assigned an internal rating based on rules similar to those applied to banks and financial institutions.

Outstanding amounts are subject to counterparty risk monitoring and to regular checks based on updated financial analyses and proposed adjustments to limits per counterparty. The Group also applies a country limit system for all countries in which it has commitments. These limits are reviewed at least annually.

Investments in derivative financial instruments are heavily regulated through the use of industry standard ISDA agreements that include compensation clauses in the event of default by either party. The Group has also adopted an additional risk mitigation mechanism by negotiating the CSA to ISDA agreements with the largest counterparties in respect of off-balance sheet transactions.
The CSA specifies the type of collateral permitted, in the form of cash or first-class securities, on the basis of periodic reassessments of bilateral positions when the net value of agreements involves a counterparty risk for the Group.

6.3.2 Credit and concentration risk

Concentration risk is the risk resulting from an excessive exposure with regard to one single borrower, a group of borrowers, an economic sector or a country. To avoid this risk, the Group's parent company has implemented a set of procedures to efficiently manage the limits set. Concentration risk can be measured either from the commitment point of view or from the point of view of the resources of the Group's parent company. In the latter case, the risk is correlated with liquidity risk.

The Group's parent company reviews at least annually the different types of limits affecting the components of concentration risk.
It has therefore invested in appropriate risk management tools in line with the range of risk profiles and different financing techniques.

In addition to counterparty limits, the Group's parent company has set up a system of limits by country and sector to contain concentration risk.

Generally speaking, commitments are concentrated in high credit ratings (AAA, AA and A) to limit risk exposure and volatility, systematically avoiding riskier segments of the market.

Maximum exposure to credit risk	31/12/2017	31/12/2018
Cash and sight accounts with central banks	5.527.885.100	4.237.236.592
Loans and advances at amortised cost – Credit institutions	3.671.386.893	2.580.582.943
Loans and advances at amortised cost - Customers	20.912.775.444	21.796.184.932
Financial instruments held for trading	85.338.534	220.216.547
Hedging derivative financial instruments	93.957.657	65.470.560
Financial assets designated at fair value through profit or loss	548.117.498	
Financial assets mandatorily measured at fair value through profit or loss		1.234.840.351
Available-for-sale securities – Fixed-income securities	9.134.090.462	
Fixed-income securities recognised at amortised cost		14.226.659.024
Held-to-maturity securities	3.946.383.118	
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	46.597.287	69.027.154
Exposure of balance sheet commitments	**43.966.531.993**	**44.430.218.102**
Completion bonds	397.360.536	423.220.707
Letters of credit	100.149.572	82.986.242
Counter-guarantees	371.897.027	379.500.912
Other	26.905.787	5.136.715
Undrawn confirmed credits	5.766.634.921	5.351.527.190
Documentary credits	13.315.287	13.412.664
Exposure of off-balance sheet commitments	**6.676.263.130**	**6.255.784.429**
Total exposure	**50.642.795.124**	**50.686.002.531**

The Group uses the following standard techniques to mitigate credit and counterparty risk:

- collateral:

Breakdown by type of collateral	2017	2018
Mortgages	14.024.465.831	15.186.236.992
Reverse repurchase/Repurchase agreements	3.545.425.085	932.334.078
Pledge through cash or securities deposits	121.353.676	130.295.213

- personal guarantees: these stood at EUR 56.399.872 at year-end 2018, compared with EUR 57.518.559 one year earlier,
- ISDA – CSA contracts,
- Global Master Repurchase Agreements (GMRA).

Financial assets that are the subject of a legally enforceable netting framework agreement or a similar agreement:

31/12/2018	Financial assets that are the subject of netting			Potential netting not recognised on the balance sheet		Financial assets after taking potential netting into account
	Financial assets before balance sheet netting	Balance sheet netting with financial liabilities	Financial assets recorded on the balance sheet	Financial liabilities	Collateral received	
Reverse repurchase/ Repurchase agreements	1.718.124.869	820.863.976	897.260.894	23.102.293	305.925.276	1.180.083.877
Derivatives	127.410.744	-	127.410.744	30.295.213	96.349.496	766.035
Total assets	**1.845.535.614**	**820.863.976**	**1.024.671.638**	**53.397.506**	**209.575.780**	**1.180.849.912**

31/12/2017	Financial assets that are the subject of netting			Potential netting not recognised on the balance sheet		Financial assets after taking potential netting into account
	Financial assets before balance sheet netting	Balance sheet netting with financial liabilities	Financial assets recorded on the balance sheet	Financial liabilities	Collateral received	
Reverse repurchase/ Repurchase agreements	3.072.608.756	1.128.770.758	1.943.837.998	223.130.390	1.737.483.518	-
Derivatives	58.522.012	-	58.522.012	40.276.706	18.144.539	100.768
Total assets	**3.131.130.768**	**1.128.770.758**	**2.002.360.010**	**263.407.095**	**1.755.628.057**	**100.768**

Financial liabilities that are the subject of a legally enforceable netting framework agreement or a similar agreement:

31/12/2018	Financial liabilities that are the subject of netting			Potential netting not recognised on the balance sheet		Financial liabilities after taking potential netting into account
	Financial liabilities before balance sheet netting	Balance sheet netting with financial assets	Financial liabilities recorded on the balance sheet	Financial assets	Collateral given	
Repurchase/Reverse repurchase agreements	157.211.542	82.435.776	74.775.766	-	46.780.311	27.995.455
Derivatives	685.989.648	-	685.989.648	144.673.529	271.178.292	270.137.827
Total liabilities	**843.201.191**	**82.435.776**	**760.765.415**	**144.673.529**	**317.958.604**	**298.133.282**

31/12/2017	Financial liabilities that are the subject of netting			Potential netting not recognised on the balance sheet		Financial liabilities after taking potential netting into account
	Financial liabilities before balance sheet netting	Balance sheet netting with financial assets	Financial liabilities recorded on the balance sheet	Financial assets	Collateral given	
Repurchase/Reverse repurchase agreements	735.219.408	542.198.113	193.021.295	-	183.473.644	9.547.650
Derivatives	715.286.115	-	715.286.115	105.845.366	486.372.786	123.067.964
Total liabilities	**1.450.505.523**	**542.198.113**	**908.307.410**	**105.845.366**	**669.846.430**	**132.615.614**

6.3.3 Analysis of credit risk relating to financial assets

Pursuant to IFRS, the Group assesses its exposure to financial asset credit risk as the book value.

In the "Quantitative tables of exposures and concentrations" section, exposure to credit risk is indicated at book value before collateralisation. Collateralisation is a technique for reducing the risk of the underlying asset.

Credit risk is shown according to exposures:

- by geography,
- by counterparty category,
- by risk class (internal ratings).

Exposure by geographical area:

Geographical area as at 31.12.2018 (in thousands of euros)	European Union and Switzerland	Other European countries	North America	Asia and Australasia	Supra-national	Other	Total
Cash and sight accounts with central banks	4.203.801	376	18.097	4.123	-	10.839	4.237.237
Loans and advances at amortised cost	23.715.791	14.741	92.565	481.197	21	72.452	24.376.768
Financial instruments held for trading and hedging derivative instruments	221.428	-	603.330	3.929	-	-	283.687
Financial assets mandatorily measured at fair value through profit or loss	730.546	10.496	221.953	28.105	172.435	71.305	1.234.840
Fixed-income securities recognised at amortised cost	9.258.606	471.851	2.580.139	1.039.972	701.083	175.008	14.226 659
Variable-income securities recognised at fair value through the revaluation reserve	1.218.949	-	-	-	-	-	1.218.949
Other	403.463	-	-	-	-	-	403.463
Total	**39.752.584**	**497.465**	**2.973.083**	**1.557.326**	**873.539**	**329.605**	**45.983.602**

Geographical area as at 31.12.2017 (in thousands of euros)	European Union and Switzerland	Other European countries	North America	Asia and Australasia	Supra-national	Other	Total
Cash and sight accounts with central banks	5.462.660	12.557	31.598	10.630	1	10.439	5.527.885
Loans and receivables at amortised cost	24.401.361	18.280	11.423	61.718	5.912	85.469	24.584.162
Financial instruments held for trading and hedging derivative financial instruments	171.893	30	4.885	2.445	-	43	179.296
Available-for-sale securities	7.195.903	177.364	1.629.815	632.154	548.308	160.733	10.344.278
Held-to-maturity securities	2.803.559	180.256	653.182	203.932	105.434	-	3.946.383
Other	656.160	10.948	184.394	-	2.942	72.507	926.952
Total	**40.691.536**	**399.435**	**2.515.297**	**910.880**	**662.617**	**329.192**	**45.508.956**

In the following table, to meet the requirements of IFRS 7 "Financial instruments: Disclosures", exposure to credit risk as at 31 December 2017 and 2018 is presented according to internal ratings.

Exposure by counterparty category and risk class:

	2017			2018		
	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio
Cash and sight accounts with central banks						
High grade	5.262.262.779	5.262.262.779		4.051.862.915	4.051.837.652	-
Standard grade	265.622.317	265.622.317	-	185.564.476	185.332.952	-
Sub-standard grade	-	-	-	66.351	65.988	-
Default	-	-	-	-	-	-
Not rated	3	3	-	-	-	-
Total of categories	**5.527.885.100**	**5.527.885.100**		**4.237.493.743**	**4.237.236.592**	**-**
Loans and advances at amortised cost						
Banks						
High grade	1.200.017.209	1.200.017.209	24.97%	689.572.252	689.324.201	5.10%
Standard grade	2.448.548.430	2.448.548.430	92.08%	1.829.679.346	1.828.824.454	33.75%
Sub-standard grade	20.885.964	20.885.964	-	20.021.391	19.995.433	-
Past due not in default	1.930.400	1.930.400	100.00%	-	-	-
Default	-	-	-	-	-	-
Not rated	4.890	4.890	-	42.477.986	42.477.986	-
Corporates						
High grade	2.149.772.219	2.149.772.219	33.71%	2.214.510.587	2.208.515.333	36.11%
Standard grade	2.156.015.104	2.156.015.104	63.78%	2.096.436.150	2.092.578.842	39.06%
Sub-standard grade	825.630.203	825.630.203	54.30%	965.816.496	947.202.216	46.10%
Past due not in default	30.849.364	30.849.364	79.32%	5.340.063	5.294.435	92.14%
Default	213.565.575	152.270.088	26.87%	197.210.270	139.624.403	26.37%
Not rated	93.655.789	93.655.789	27.68%	62.578.297	62.246.584	87.51%
Sovereigns						
High grade	1.867.102.229	1.867.102.229		1.694.768.537	1.694.731.794	-
Standard grade	6.832	6.832	-	3.512	3.501	-
Sub-standard grade	31.053	31.053	-	23.010	22.533	-
Past due not in default	20.487.435	20.487.435	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Retail						
High grade	10.168.141.791	10.168.141.791	91.98%	11.179.426.258	11.178.506.731	92.29%
Standard grade	1.816.693.765	1.816.693.765	92.78%	1.866.153.745	1.865.290.097	91.50%
Sub-standard grade	1.419.321.936	1.419.321.936	89.55%	1.537.640.061	1.519.757.406	89.40%
Past due not in default	137.027.672	137.027.672	91.79%	29.568.588	29.156.276	87.28%
Default	93.566.791	75.795.639	79.90%	66.050.076	53.215.513	78.42%
Not rated	-25.674	-25.674	0.00%	136	136	100.00%
Total of categories	**24.663.228.976**	**24.584.162.337**		**24.497.276.760**	**24.376.767.874**	

	2017			2018		
	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio
Financial instruments held for trading and hedging derivatives						
Banks						
High grade	51.173.755	51.173.755	12.65%	176.042.896	176.042.896	-
Standard grade	92.502.412	92.502.412	15.16%	78.039.722	78.039.722	0.00%
Sub-standard grade	87.983	87.983	100.00%	-	-	-
Default	-	-		-	-	-
Not rated	-	-		4.059.237	4.059.237	-
Corporates						
High grade	77.572	77.572	-	935.100	935.100	-
Standard grade	31.138.107	31.138.107	91.95%	20.256.308	20.256.308	0.00%
Sub-standard grade	1.755.260	1.755.260	-	2.526.863	2.526.863	0.04%
Default	-	-	-	-	-	-
Not rated	2.310.069	2.310.069	27.59%	-	-	-
Sovereigns						
High grade	-	-	-	-	-	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Retail						
High grade	182.536	182.536	-	2.464.846	2.464.846	-
Standard grade	8.971	8.971	-	976.193	976.193	-
Sub-standard grade	27.145	27.145	-	-	-	-
Default	-	-	-	-	-	-
Not rated	32.381	32.381	-	385.942	385.942	-
Total of categories	**179.296.191**	**179.296.191**		**285.687.107**	**285.687.107**	
Financial assets mandatorily recognised at fair value through profit or loss						
Banks						
High grade				464.613.895	464.613.895	-
Standard grade				166.652.857	166.652.857	-
Sub-standard grade				-	-	-
Default				-	-	-
Not rated				-	-	-
Corporates						
High grade				339.125.607	339.125.607	-
Standard grade				158.077.613	158.077.613	
Sub-standard grade				41.341.246	41.341.246	
Default				1.921	1.921	-
Not rated				-	-	
Sovereigns						
High grade				65.002.389	65.002.389	-
Standard grade				-	-	-
Sub-standard grade				-	-	-
Default				-	-	-
Not rated				-	-	-
Securitisation						
High grade				-	-	-
Standard grade				-	-	-
Sub-standard grade				-	-	-
Default				24.823	24.823	-
Not rated				-	-	-
Total of categories					**1.234.840.351**	

	2017			2018		
	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio
Available-for-sale securities and investments in associates accounted for using the equity method						
Banks						
High grade	3.061.488.802	3.061.488.802	-			
Standard grade	1.405.416.278	1.405.416.278	-			
Sub-standard grade	-	-	-			
Default	-	-	-			
Not rated	-	-	-			
Corporates						
High grade	1.081.305.192	1.081.305.192	-			
Standard grade	2.283.177.647	2.283.177.647	-			
Sub-standard grade	62.318.213	62.318.213	-			
Default	2.337.552	822.053	-			
Not rated	108.662.411	108.662.411	-			
Sovereigns						
High grade	1.512.558.832	1.512.558.832	-			
Standard grade	734.809.288	734.809.288	-			
Sub-standard grade	-	-	-			
Default	-	-	-			
Not rated	-	-	-			
Securitisation						
High grade	65.007.534	65.007.534	-			
Standard grade	4.829.851	4.829.851	-			
Sub-standard grade	1.795.917	1.795.917	-			
Default	41.264.642	22.085.675	-			
Not rated	-	-	-			
Total of categories	**10.364.972.160**	**10.344.277.692**				
Fixed-income securities recognised at amortised cost						
Banks						
High grade				5.848.791.745	5.846.338.621	-
Standard grade				2.020.209.458	2.018.595.137	-
Sub-standard grade				-	-	-
Default				-	-	-
Not rated				-	-	-
Corporates						
High grade				1.852.890.208	1.851.731.120	-
Standard grade				1.670.520.744	1.669.170.634	-
Sub-standard grade				5.089.822	5.064.626	-
Default				-	-	-
Not rated				-	-	-
Sovereigns						
High grade				2.107.297.421	2.107.036.941	-
Standard grade				627.295.108	627.009.298	-
Sub-standard grade				-	-	-
Default				-	-	-
Not rated				-	-	-
Securitisation						
High grade				74.794.511	74.236.722	-
Standard grade				24.370.067	24.319.855	-
Sub-standard grade				-	-	-
Default				7.206.764	3.156.069	-
Not rated				-	-	-
Total of categories				**14.238.465.848**	**14.226.659.024**	

	2017			2018		
	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio
Variable-income securities measured at fair value through the revaluation reserve						
Banks						
High grade				3.666.600	3.666.600	-
Standard grade				-	-	-
Sub-standard grade				-	-	-
Default				-	-	-
Not rated				-	-	-
Corporates						
High grade				49.148.579	49.148.579	-
Standard grade				1.158.836.485	1.158.836.485	-
Sub-standard grade				1.720.686	1.720.686	-
Default				720.073	720.073	-
Not rated				4.856.179	4.856.179	-
Sovereigns						
High grade						-
Standard grade				-	-	-
Sub-standard grade				-	-	-
Default				-	-	-
Not rated				-	-	-
Total of categories				**1.218.948.603**	**1.218.948.603**	
Held-to-maturity securities						
Banks						
High grade	1.479.595.613	1.479.595.613	-			
Standard grade	1.041.637.736	1.041.637.736	-			
Sub-standard grade	-	-	-			
Default	-	-	-			
Not rated	-	-	-			
Corporates						
High grade	218.501.610	218.501.610	-			
Standard grade	506.957.009	506.957.009	-			
Sub-standard grade	-	-	-			
Default	-	-	-			
Not rated	-	-	-			
Sovereigns						
High grade	619.940.426	619.940.426	-			
Standard grade	79.750.725	79.750.725	-			
Sub-standard grade	-	-	-			
Default	-	-	-			
Not rated	-	-	-			
Total of categories	**3.946.383.118**	**3.946.383.118**				
Other (*)	926.951.848	926.951.848	-	403.462.788	403.462.788	-
Total of categories	**926.951.848**	**926.951.848**		**403.462.788**	**403.462.788**	
Total	**45.608.717.392**	**45.508.956.284**		**46.116.175.201**	**45.983.602.339**	

(*) For 2017, "Other" comprises "Assets designated at fair value through profit or loss", "Change in fair value of a portfolio of financial instruments hedged against interest rate risk", "Tangible assets for own use", "Investment property", "Intangible assets", "Deferred taxes" and "Other assets".
For 2018, this item comprises "Change in fair value of a portfolio of financial instruments hedged against interest rate risk", "Tangible assets for own use", "Investment property", "Intangible assets", "Deferred taxes" and "Other assets".

For the 2018 financial year, “Investments in associates accounted for using the equity method” were included in “Fixed-income securities measured at fair value through the revaluation reserve”.

The Group enters outstanding amounts where the contractual payment due date has passed by at least one day on the line “Past due not in default” under “Loans and advances at amortised cost”. In “Securities recognised at amortised cost”, the Group does not record any items in the line “Past due but not impaired” and uses the “Objective impairment evidence” to determine individual impairments.

The average collateralisation ratio gives the average hedging ratio of outstanding amounts by collateral held.

An indication of the level of impairment is provided in the columns “Outstanding amount excluding impairment” and “Outstanding amount including impairment”.

Banks, Corporates, Sovereigns and Retail:

The grouping according to internal risk category corresponds, for example with the following “S&P” equivalents:

High grade : from AAA to A+
Standard grade : from A to BBB-
Sub-standard grade : from BB+ to BB-

Outstanding amounts described as “Default” relate to outstanding amounts showing objective impairment evidence and whose internal risk category (internal rating) is equal to or lower than a B+ rating.

Securitisation:

The grouping according to internal risk category corresponds, for example with the following “S&P” equivalents:

High grade : from AAA to A+
Standard grade : from A to BBB-

Outstanding amounts described as “Default” relate to outstanding amounts showing objective impairment evidence and whose internal risk category (internal rating) is equal to or lower than a BB+ rating.

6.4 Market risk

6.4.1 Objectives and management of risk

"Short-term" liquidity, up to six months, and interest rate risk, up to two years, are managed by the Money Market desk (treasury) of the FIM unit ("Financial Markets").

Mismatch and long-term liquidity risks are handled by the ALM (Asset Liability Management) Committee. The Committee ensures that the Group's equity capital and invested funds are appropriately managed, and that its national and international loan portfolios and proprietary bond and equity portfolios are refinanced in such a way as to minimise the negative impact of yield curve movements on the Group's performance. The ALM committee consists of the members of the Executive Committee of the Group's parent company and certain department heads and unit heads. The ALM Committee is assisted by an ALM Subcommittee, which meets monthly.

All components of market risk, such as interest rate risk, foreign exchange risk and share price risk affecting the on- and off-balance sheet positions managed by ALM or treasury, are centralised in real time in the trading room's front-office system and are managed within the limits set by the parent company's Executive Committee. The Risk Management unit is responsible for regular reporting on compliance with the limits and the levels of risk incurred to the Executive Committee.

The Group did not change its market risk management policy in the 2018 financial year. However, in 2017, the Group launched a project to gain new ways to quantify financial risks, of which interest rate risk is a key element. As of the end of 2018, work on interest rate risk was nearing completion, and the final checks of the results are in progress.

Risk levels are primarily monitored using a VaR (Value at Risk) model. Trading and cash management activities are each subject to their own VaR limits. The following table sets out VaR for the different scopes in millions of euros:

Scope	Average daily VaR in 2018	Maximum daily VaR in 2018	VaR limit for the scope in question in 2018
ALM	6.74	8.92	12.50
Treasury	0.37	0.90	2.50
Trading	0.13	0.47	no limit

Scope	Average daily VaR in 2017	Maximum daily VaR in 2017	VaR limit for the scope in question in 2017
ALM	5.92	7.80	12.50
Treasury	0.19	0.38	2.50
Trading	0.06	0.17	no limit

In addition to VaR, which is used for the aggregate management of the different types of market risk, the Group uses other risk management tools depending on the characteristics of the financial instruments concerned. Accordingly, interest rate risk is managed by simulating the financial impact of a parallel one basis point (0,01%) change in the yield curve on the net present value (NPV) of each position. Daily reports show the total financial impact arising from a parallel one basis point shift in all yield curves, also known as basis point value (BPV), which must stay within preset limits.

6.4.2 Analysis of the value of financial instruments

The following table presents the comparison by category of the carrying amounts and fair values of the Group's financial instruments included in the consolidated financial statements.

Categories at 31/12/2018	Carrying amount	Fair value	Unrealised valuation
Financial assets			
Cash and sight accounts with central banks	4.237.236.592	4.237.236.592	-
Loans and advances at amortised cost	24.376.767.875	24.710.289.820	333.521.945
of which measured at fair value for hedging purposes	*1.670.318.572*	*1.670.318.572*	-
Financial instruments held for trading	220.216.547	220.216.547	-
Hedging derivative financial instruments	65.470.560	65.470.560	-
Financial assets mandatorily measured at fair value through profit or loss	1.234.840.351	1.234.840.351	-
Fixed-income securities recognised at amortised cost	14.226.659.024	14.206.965.915	-19.693.109
Variable-income securities recognised at fair value through the revaluation reserve	863.396.081	863.396.081	-
Investments in associates accounted for using the equity method	355.552.522	355.552.522	-
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	69.027.154	69.027.154	-
TOTAL	**45.649.166.705**	**45.962.995.542**	**313.828.836**
Financial liabilities			
Deposits at amortised cost	36.717.994.115	36.880.812.103	162.817.988
Financial instruments held for trading	133.331.389	133.331.389	-
Hedging derivative financial instruments	606.826.289	606.826.289	-
Financial liabilities designated at fair value through profit or loss	151.566.706	151.566.706	-
Debt securities in issue	3.646.594.429	3.647.030.117	435.688
of which measured at fair value for hedging purposes	*355.598.448*	*355.598.448*	-
TOTAL	**41.256.312.927**	**41.419.566.604**	**163.253.676**

Categories on 31/12/2017	Carrying amount	Fair value	Unrealised valuation
Financial assets			
Cash and sight accounts with central banks	5.527.885.100	5.527.885.100	-
Loans and receivables at amortised cost	24.584.162.337	26.981.629.657	2.397.467.320
of which measured at fair value for hedging purposes	*1.670.318.572*	*1.670.318.572*	-
Financial instruments held for trading	85.338.534	85.338.534	-
Hedging derivative financial instruments	93.957.657	93.957.657	-
Financial assets designated at fair value through profit or loss	548.117.498	548.117.498	-
Available-for-sale securities – Fixed-income securities	9.134.090.462	9.134.090.462	-
Available-for-sale securities – Variable-income securities	832.066.938	832.066.938	-
Held-to-maturity securities	3.946.383.118	4.049.138.249	102.755.131
Investments in associates accounted for using the equity method	378.120.296	378.120.296	-
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	46.597.287	46.597.287	-
TOTAL	**45.176.719.227**	**47.676.941.678**	**2.500.222.451**
Financial liabilities			
Deposits at amortised cost – Customers	36.253.157.305	36.625.018.623	371.861.318
Financial instruments held for trading	202.116.831	202.116.831	-
Hedging derivative financial instruments	588.498.489	588.498.489	-
Financial liabilities designated at fair value through profit or loss	146.853.974	146.853.974	-
Debt securities in issue	3.713.017.053	3.713.219.767	202.714
of which measured at fair value for hedging purposes	*355.598.448*	*355.598.448*	-
TOTAL	**40.903.643.652**	**41.275.707.684**	**372.064.032**

The fair value of financial instruments not recognised at fair value in the balance sheet is determined according to the methods and estimates described below.

The fair value measurements in “Loans and advances at amortised cost - Customers”, “Securities measured at amortised cost” and “Debt securities in issue” are categorised as Levels 1 and 2 in the fair value hierarchy.

Assets and liabilities at amortised cost in the balance sheet with a fair value close to the book value

In respect of financial assets and liabilities with a maturity date of 6 months or less, the Group estimates their fair value as very close to their carrying amount. The credit risk is considered to be immaterial due to the Group's prudent policy and the imminent maturity. The low residual duration also means that the rate risk is immaterial.

Similarly, the fair value of assets collateralised is very close to their book value, since the credit risk is hedged. These are essentially repurchase agreements, secured loans and equipment loans.

Financial assets and liabilities at amortised cost in the balance sheet with a fair value different from the carrying amount

Financial assets and liabilities towards customers, as well as fixed-income securities are recognised at amortised cost in the balance sheet.

For the purpose of fair value calculation, the Group distinguishes between instruments quoted on a market and over-the-counter instruments.

Fixed-income securities included in the portfolio of fixed-income securities measured at amortised cost are bonds quoted on a market.

For assets and liabilities to customers, the Group calculates the fair value of financial assets and liabilities towards customers using the discounted cash flow method based on:

a. credit risk data such as the customer's risk classification, probability of default and loss given default. These criteria were established based on historical observations of defaults and are used to determine credit risk premiums (credit spreads) by risk class, duration and type of financial instrument,
b. a reference yield curve.

Hierarchy of assets and liabilities at fair value

Assets and liabilities at fair value:

Categories on 31 December 2018	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading				
- Debt instruments	-	-	-	-
- Equity instruments	-	-	-	-
- Derivative financial instruments	-	*220.216.547*	-	*220.216.547*
Financial assets mandatorily measured at fair value through profit or loss				
- Debt instruments	*4.464.372*	*1.227.544.045*	*26.746*	*1.232.035.163*
- Equity instruments	-	*2.805.188*	-	*2.805.188*
Variable-income securities recognised at fair value through the revaluation reserve	109.155.840	418.237.217	336.003.025	863.396.081
Hedging derivative financial instruments	-	65.470.560	-	65.470.560
TOTAL	**113.620.212**	**1.934.273.557**	**336.029.771**	**2.383.923.539**
Financial liabilities				
Financial instruments held for trading Derivatives held for trading	-	133.331.388	-	133.331.388
Financial liabilities designated at fair value through profit or loss	-	151.566.706	-	151.566.706
Hedging derivative financial instruments	-	606.826.289	-	606.826.289
TOTAL	**-**	**891.724.383**	**-**	**891.724.383**

Categories on 31 December 2017	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading				
- Debt instruments	*22.713*	-	-	*22.713*
- Equity instruments	-	-	-	-
- Derivative financial instruments	-	*85.315.821*	-	*85.315.821*
Available-for-sale financial assets				
- Debt instruments	*5.878.227.888*	*3.162.062.028*	*93.800.546*	*9.134.090.463*
- Equity instruments	*148.959.036*	*388.250.263*	*294.857.637*	*832.066.938*
Financial assets designated at fair value through profit or loss	-	548.117.498	-	548.117.498
Hedging derivative financial instruments	-	93.957.657	-	93.957.657
TOTAL	**6.027.209.637**	**4.277.703.267**	**388.658.183**	**10.693.571.090**
Financial liabilities				
Financial instruments held for trading		-	-	-
Derivative financial instruments held for trading	-	202.116.831	-	202.116.831
Financial liabilities designated at fair value through profit or loss	-	146.853.974	-	146.853.974
Hedging derivative financial instruments	-	588.498.489	-	588.498.489
TOTAL	**-**	**937.469.294**	**-**	**937.469.294**

The introduction of IFRS 9 at the beginning of the 2018 financial year explains the significant change in asset items measured at fair value. The total measured at fair value therefore decreased from EUR 10,51 billion to EUR 2,10 billion. The most significant decrease is shown for fair value levels 1 and 2. However, even in the face of the changes involved in IFRS 9, level 3 has maintained comparability. The same applies to liability items, which are virtually unaffected by the transposition of IFRS 9.

A comparison of the breakdown of financial assets by level at end-2018 shows that 4,8% of financial assets are classified as Level 1, 81,1% as Level 2 and 14,1% as Level 3.

The Group used measurement models based on market data to calculate the fair value of Level 2 positions and measurement models based on estimates and market data to calculate the value of Level 3 positions.

Level 3 of financial instruments in assets for 2018 retains some comparability with the previous year. Although the proportion of Level 3 instruments increased from 3,63% to 14,1%, the reported carrying value decreased by EUR 52,9 million due to a different basis of comparison. The largest decrease is for debt instruments and is directly related to the implementation of IFRS 9. The increases in the equity instrument classes are mainly due to the effect of revaluation of the various positions.

All the financial instruments in the liability categories continue to be at level 2.

Level 3 breakdown:

	Financial assets mandatorily measured at fair value through profit or loss		Variable-income securities recognised at fair value through the revaluation reserve	Hedging derivative financial asset instruments	Total financial assets
	Debt instruments	Equity instruments			
Total as at 1 January 2018	**34.495.802**	**-**	**260.467.592**	**-**	**294.963.394**
Total gains / losses	2.296.313	-	72.149.279	-	**74.445.591**
- Income statement	*2.296.313*	-	-	-	***2.296.313***
- Revaluation reserve	-	-	*72.149.279*	-	***72.149.279***
Purchases	-6.475	-	3.820.165	-	**3.813.690**
Reimbursements/sales	-2.368.848	-	-434.011	-	**-2.802.859**
Transfers from Level 1 to Level 3	-	-	-	-	**-**
Transfers from Level 2 to Level 3	-	-	-	-	**-**
Transfers from Level 3	-34.390.045	-	-	-	**-34.390.045**
Total as at 31 December 2018	**26.746**	**-**	**336.003.024**	**-**	**336.029.771**
Total gains/losses for the period included in the income statement for financial assets and liabilities held as at 31 December 2018	2.296.313	-	-	-	**2.296.313**

	Available-for-sale financial assets			Hedging derivative financial instruments	Total financial assets
	Debt instruments	Equity instruments	Shares in associates and subsidiaries		
Total at 1 January 2017	**109.801.099**	**124.943.653**	**318.957.117**	**-**	**553.701.869**
Total gains / losses	11.954.928	10.424.194	69.629.606	.	92.008.727
- Income statement	*11 776 452*	-	-	-	11 776 452
- Revaluation reserve	*178.475*	*10.424.194*	*69.629.606*	-	80.232.275
Purchases	6.526.759	-4.888.720	2	.	1.638.041
Reimbursements/sales	-34.482.239	-	-4.761	-	-34.487.000
Transfers from Level 1 to Level 3	-	-	-	-	-
Transfers from Level 2 to Level 3	-	122.709.341	-	-	122.709.341
Transfers from Level 3	-	-	-	-	-
Total on 31 December 2017	**93.800.546**	**253.188.468**	**388.581.964**	**-**	**735.570.978**
Total gains/losses for the period included in the income statement for financial assets and liabilities held as at 31 December 2017	11 776 452	-	9.813.888	-	21.590.340

Methods used for the Level 3 valuation:

Category	Method
- Debt instruments	For securitisations, the fair value measurement is based on an estimate of future flows and on a dedicated basis spread (J.P. Morgan Int ABS & CB Research or SIFMA Markit). Some positions include an impairment that does not result solely from a determination based on the cash flow method but also takes an appraiser assessment into account.
- Equity instruments	The valuation methods applied are detailed in Section 3.3.3 Valuation techniques for determining fair value and the fair value hierarchy

Sensitivity analysis for Level 3:

The sensitivity analysis was only performed for debt instruments. As such, the Group did not change the assumptions used in the cash flow model, but simulated a one-basis-point increase in credit risk:

Category	Fair value on 31/12/2017	Sensitivity to a one-basis-point increase in credit risk
Debt instruments	93.800.546	-23.279

The Group provides no sensitivity analysis for level 3 of the 2018 financial year due to the small amount recognised for debt instruments.

6.4.3 Analysis of foreign exchange risk: Net currency positions

At 31/12/2018	Net on-balance position
USD	70.556.685
Other	3.171.156
Total	**73.727.841**

At 31/12/2017	Net on-balance position
USD	35.357.306
Other	2.951.720
Total	**38.309.026**

Only currencies with a net currency position exceeding EUR 2 million are recorded on a separate line.

6.5 Liquidity risk

6.5.1 Schedule of liabilities

Tables showing the balance sheet liabilities over the remaining residual life until repayment according to contractual data:

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2018
Issuance of securities*	2.252.735.727	908.924.843	**3.161.660.570**	224.084.292	539.970.641	**764.054.932**	**3.925.715.502**
Deposits at amortised cost -							
Credit institutions	3.375.223.913	775.695.923	**4.150.919.836**	783.922.772	156.439	**784.079.212**	**4.934.999.048**
Customers	31.149.644.947	1.263.950.423	**32.413.595.370**	534.279.648	85.377.235	**619.656.884**	**33.033.252.253**
Total	**36.777.604.587**	**2.948.571.189**	**39.726.175.775**	**1.542.286.712**	**625.504.315**	**2.167.791.027**	**41.893.966.803**

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2017
Issuance of securities*	2.001.083.978	1.191.891.415	**3.192.975.393**	253.727.456	550.580.456	**804.307.912**	**3.997.283.306**
Deposits at amortised cost -							
Credit institutions	3.235.523.769	775.503.337	**4.011.027.106**	786.016.773	2.346.648	**788.363.421**	**4.799.390.527**
Customers	29.562.851.470	1.161.225.438	**30.724.076.908**	700.451.022	101.578.954	**802.029.976**	**31.526.106.884**
Total	**34.799.459.217**	**3.128.620.191**	**37.928.079.408**	**1.740.195.251**	**654.506.058**	**2.394.701.309**	**40.322.780.717**

*including financial liabilities designated at fair value through profit or loss

Table showing deposits from private customers and the public sector according to "expected" maturity dates determined in accordance with the ALM policy:

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2018
Deposits at amortised cost -							
Customers	12.578.160.871	4.405.168.545	**16.983.329.416**	9.472.623.526	5.525.923.695	**14.998.547.222**	**31.981.876.638**

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2017
Deposits at amortised cost -							
Customers	11.577.008.299	4.312.915.558	**15.889.923.857**	9.086.504.360	6.643.450.245	**15.729.954.605**	**31.619.878.461**

6.5.2 Schedule of derivative financial instruments

Table showing derivative financial instruments settled in gross cash flows

In view of the fact that residual life is calculated on the basis of contractual data, the optional feature of some contracts has not been taken into account.

Amounts are shown in euros at the exchange rates on 31 December 2018 and 31 December 2017.

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2018
Derivative financial instruments held for trading					
Foreign exchange swaps and forward exchange contracts					
Inflows	10.325.664.780	1.878.198.961	164.284.208	5.063.492	12.373.211.442
Outflows	-10.211.759.083	-1.837.932.344	-166.241.732	-3.564.204	-12.219.497.363
Derivative financial instruments used for hedging purposes					
CCIS					
Inflows	87.302.726	301.463.278	1.032.003.752	391.097.179	1.811.866.935
Outflows	-99.114.912	-343.238.326	-1.158.831.596	-465.157.946	-2.066.342.780
Total inflows	**10.412.967.506**	**2.179.662.239**	**1.196.287.960**	**396.160.671**	**14.185.078.377**
Total outflows	**-10.310.873.995**	**-2.181.170.670**	**-1.325.073.328**	**-468.722.151**	**-14.285.840.143**

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2017
Derivative financial instruments held for trading					
Foreign exchange swaps and forward exchange contracts					
Inflows	10.114.906.910	2.300.885.875	121.170.477	4.817.177	12.541.780.439
Outflows	-10.194.721.372	-2.291.648.622	-116.132.265	-3.542.489	-12.606.044.748
Derivative financial instruments used for hedging purposes					
CCIS					
Inflows	147.754.952	371.664.141	1.022.409.958	119.640.681	1.661.469.731
Outflows	-148.447.865	-401.881.696	-1.088.091.181	-139.227.574	-1.777.648.316
Total inflows	**10.262.661.862**	**2.672.550.015**	**1.143.580.435**	**124.457.858**	**14.203.250.171**
Total outflows	**-10.343.169.237**	**-2.693.530.318**	**-1.204.223.446**	**-142.770.063**	**-14.383.693.064**

Table showing derivative financial instruments settled in net cash flows:

Net cash flow liabilities from derivative financial instruments settled net are as follows:

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2018
Derivative financial instruments held for trading					
IRS	1.909.643	8.518.181	9.765.165	-33.113.365	-12.920.376
Derivative financial instruments used for hedging purposes					
IRS	42.816.600	90.340.895	357.627.890	336.501.737	827.287.122
Total outflows	**44.726.243**	**98.859.076**	**367.393.055**	**303.388.372**	**814.366.746**

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2017
Derivative financial instruments held for trading					
IRS	-343.320	7.722.726	13.607.853	-32.252.306	-11.265.048
Derivative financial instruments used for hedging purposes					
IRS	48.166.328	120.996.127	370.170.020	305.446.530	844.779.005
Total outflows	**47.823.008**	**128.718.853**	**383.777.872**	**273.194.224**	**833.513.958**

6.6 Economic capital

The Group has embarked on a process of measuring economic risk and planning the assignment of its equity resources to the various business lines.

This process and associated work are formally drawn up and reported to the CSSF in the ICAAP report, in accordance with Basel III Pillar 2. CSSF Circular 07/301 (as amended), "Implementation of the Internal Capital Adequacy Assessment Process (ICAAP)" provides for "a system of sound, effective and complete strategies and processes allowing credit institutions to assess and maintain, on an ongoing basis, the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of risks to which they are or might be exposed".

The ICAAP document describes the identification of and framework for managing the risks to which the Group is exposed, either under Basel III Pillar 1, such as credit, market, and operational risks, or Basel III Pillar 2, such as liquidity, compliance, or reputation risks.

The methods used for the economic quantification of the risks are based on adjustments and supplements to regulatory methods, as well as on measuring non-Pillar 1 risks.

The Group's capital management policy meets the objectives of the mission defined in the Bank's Articles of Association, namely "to contribute to the development of the Luxembourg economy". Accordingly, the Group aims to retain moderate leverage, which is reflected in a high target capitalisation ratio. Moreover, business within the domestic market is given priority in the allocation of capital resources.

6.6.1 Capital management policy

6.6.1.1 Determining equity capital

The Group's objective is to contribute to the development of Luxembourg's economy and to generate enough profit to strengthen its financial position.

In the framework of its economic capital model, the Group determines capital according to an economic capital approach. The Bank's basic principle for economic capital is based on a very prudent approach which consists of considering only the funds immediately available to the Group without restriction as economic capital to cover potential losses or to grow its business.

6.6.1.2 Implementation of internal capital adequacy policy

The Group has adopted the following methodology to implement its internal capital adequacy policy:

- Development of an internal risk assessment model (Basel III Pillar 1 risks plus non-Pillar 1 risks);
- Determination of a substantial safety margin between available capital and risk hedging, reflected in a high target capitalisation ratio;
- Distribution of capital according to the internal organisation of the Group's business lines and its projected results;
- Risk exposure forecasts by business;
- Calculation of the projected capital requirements to cover the Group's risks;
- Allocation of surplus capital according to the Group's strategic guidelines.

In terms of internal governance, the 2018 ICAAP and ILAAP reports were presented to the Board of Directors of the Group's parent company, which approved the proposed guidelines. In accordance with the ICAAP circular, the Board of Directors will be consulted at least annually or more frequently as needed or in the case of a major change in methodology.

Equity, Regulatory own funds and Solvency Ratio (in euros)	**31/12/2017**	**31/12/2018**
Total equity	**4.239.620.048**	**4.349.605.107**
Prudential provision adjustments	331.420.728	312.358.601
Adjustments related to changes in the corporate income statement / IFRS	-19.062.128	-30.287.817
Consolidation adjustments	-428.763.209	-342.509.909
Total adjusted equity	**4.123.215.439**	**4.289.165.982**
IFRS income for the year not included in Common Equity Tier 1 (CET1)	-221.722.417	-145.077.752
CET1 before regulatory adjustments	**3.901.493.022**	**4.144.088.230**
Regulatory adjustments to CET1	**-1.046.145.034**	**-213.695.058**
Additional value adjustments	-	-3.721.923
Fair value reserves related to gains or losses on cash flow hedges	-2.429.397	-2.094.511
Intangible assets	-18.605.053	-27.475.050
Negative amounts resulting from the calculation of expected loss amounts	-85.420.892	-40.498.599
Direct, indirect and synthetic holdings of CET1 instruments of financial sector entities in which the institution has a significant investment	-	-
Regulatory adjustments related to unrealised gains and losses pursuant to Articles 467 and 468 and Article 8 of circular CSSF 14-01 on the implementation of certain discretions of Regulation (EU) 575/2013	-778.228.665	-
Amount to be deducted or added to CET1 pursuant to circular CSSF 14/599 on the treatment of the flat-rate provision and the AGDL provision	-161.461.027	-139.904.975
Tier 1 Regulatory Own Funds (CET 1)	**2.855.347.988**	**3.930.393.172**
Tier 2 Regulatory Own Funds	**78.530.869**	**58.624.504**
Tier 2 Regulatory Own Funds	78.530.869	58.624.504
Total regulatory Own Funds	**2.933.878.857**	**3.989.017.676**
Total capital requirement	**1.246.113.045**	**1.405.459.900**
Solvency ratios		
Tier 1 solvency ratio	18.33%	22.37%
Total solvency ratio	18.84%	22.71%

The regulatory own funds and the solvency ratios apply only to the Group's parent company.

As in 2017, regulatory own funds were determined in accordance with the Basel III regulation on the basis of IFRS balance sheet equity, including the flat-rate provision.

7 SEGMENT REPORTING

In accordance with IFRS 8, segment reporting is presented in line with the Group's internal organisation and its internal reporting system (management approach).

7.1 Business segments

The Group's operations are organised into significant segments, as defined by the parent company's Executive Committee, with similar profitability and risk characteristics, representing coherent product groups aimed at the same type of customers and counterparties. The businesses defined in this way are managed separately and are grouped into specific business lines in the Group's organisational chart. The segments are:

- Retail, Professional, Corporate and Public Sector Banking: business line including deposits, loans, advisory and transactions activities for this customer base, excluding activities directly handled by the trading room. From an organisational point of view, these activities fall within the remit of the Retail and Private Banking and Corporate Banking departments.

- Financial Markets and Investment Funds: activities relating to Treasury, Trading, Asset and Liability Management, Customer Desk, mutual fund administration and management. From an organisational point of view, these activities fall within the remit of the Financial Markets and Investment Customers departments.

- Other: includes all back-office and support activities, income from investments, and costs not allocated to a specific business on a reasonable basis.

The results of these businesses include inter-entity transactions, which are valued by reference to a market price for transactions relating to financing and lending between businesses. Back-office services are valued at an internal standard price.

The difference between the sum of the figures for the segments and the Group's overall consolidated financial statements stems from the following items:

- Interest margin: the difference between the interest margin allocated to businesses and the total margin results from differences in valuation methods for internal transactions between the Financial Markets department and the other segments.

  In 2018, the interest margin difference was below the Group's materiality limit.

- Commissions: the reconciliation difference consists of the sum of commissions not directly attributable to a business. It is the Group's view that the development cost for allocating these flows to a business would exceed the benefit obtained from this information.

Gross receivables and deposits of the Retail and Private Banking and Corporate Banking businesses are recognised at their annual average amount and not their year-end amount, in line with the management approach.

The reconciliation difference for assets and liabilities stems from taking into account average outstanding amounts compared with end-of-period outstanding amounts, assets for customers not attributable to a business and from assets not spread out over businesses (suspense accounts, tax assets and liabilities and internal accounts).

7.2 Geographical segments

All BCEE Group operations are carried out from within the Grand Duchy of Luxembourg.

7.3 Information on products and services

The Group's net bank margin (NBI) breaks down between these main products:

- deposits from private customers, business customers, corporates, and the public sector;
- loans and advances to private customers, business customers, corporates, and the public sector;
- other products for private customers, business customers, corporates, and the public sector;
- other products.

Net Banking Income is measured taking into account the interest, fees and commissions re-invoiced between businesses.

7.4 Information on major customers

Neither one individual customer nor any consolidated group of customers generates more than 10% of the Group's NBI.

31/12/2018 In thousands of euros	Retail, Professional, Corporate and Public Sector Banking	Financial Markets and Institutional Clients	Other	Reconciliation	Total
Net interest margin	244.107	75.994	36.359	247	356.707
Income from variable-income securities	-	6.415	24.942	-	31.357
Fee and commission income	71.957	34.540	39.308	-	145.806
External commissions	*82.500*	*58.974*	*4.331*	-	*145.806*
Internal commissions	*-10.543*	*-24.434*	*34.977*	-	-
Income from financial instruments and foreign exchange	3.989	2.800	-1.364	-	5.425
Net Banking Income	**320.053**	**119.749**	**99.245**	**247**	**539.294**
Other operating income and expenses	-	-544	-28.042	-	-28.586
Banking income	**320.053**	**119.205**	**71.203**	**247**	**510.708**
General administrative expenses plus valuation allowances in respect of intangible and tangible assets	-202.097	-39.572	-104.403	-	-346.072
Net allowances for valuation and impairment	18.487	3.485	225	-	22.198
Other	-	-	259	-	259
Income before tax	**136.443**	**83.118**	**-32.716**	**247**	**187.092**
Tax on income for the period and deferred taxes	-	-	-38.554	-	-38.554
Minority interests/Income from associates	-	-1.931	12.331	-	10.401
Income/(loss)	**136.443**	**81.187**	**-58.939**	**247**	**158.939**
Assets	**20.982.920**	**23.236.315**	**1.764.367**	**-**	**45.983.602**
Liabilities	**23.723.729**	**20.935.614**	**1.324.012**	**247**	**45.983.602**

31/12/2017 In thousands of euros	Retail, Professional, Corporate and Public Sector Banking	Financial Markets and Institutional Clients	Other	Reconciliation	Total
Net interest margin	251.804	74.818	33.321	3.669	363.612
Income from securities	-	9.069	38.319	-	47.389
Fee and commission income	51.061	32.606	57.585	-	141.253
External commissions	*77.981*	*56.661*	*6.611*	-	*141.253*
Internal commissions	*-26.920*	*-24.055*	*50.974*	-	-
Income from financial instruments and foreign exchange	3.548	46.551	2	-	50.100
Net Banking Income	**306.413**	**163.045**	**129.227**	**3.669**	**602.354**
Other operating income and expenses	-	-108	-16.331	-	-16.439
Banking income	**306.413**	**162.937**	**112.896**	**3.669**	**585.914**
General administrative expenses plus valuation allowances in respect of intangible and tangible assets	-178.969	-37.560	-115.200	-	-331.729
Net allowances for valuation and impairment	7.089	7.341	2.632	-	17.063
Other	-	-	1.082	-	1.082
Income before tax	**134.533**	**132.718**	**1.411**	**3.669**	**272.331**
Tax on income for the period and deferred taxes	-	-	-50.995	-	-50.995
Minority interests/ income from associates	-	-2.126	37.402	-	35.275
Income/(loss)	**134.533**	**130.592**	**-12.183**	**3.669**	**256.611**
Assets	**24.578.784**	**19.689.153**	**1.241.019**	**-**	**45.508.956**
Liabilities	**28.052.588**	**12.850.560**	**4.602.139**	**3.669**	**45.508.956**

NBI in thousands of euros	31/12/2017	31/12/2018
Deposits from private customers, business customers, corporates and the public sector	38.334	26.473
Loans and advances to private customers, business customers, corporates and the public sector	218.698	242.035
Other products for private customers, business customers, corporates and the public sector	49.381	51.545
Other products	295.941	219.241

THE BANK'S GOVERNING BODIES

The organisation of the Banque et Caisse d'Epargne de l'Etat, Luxembourg, the leading national financial institution, founded in 1856, is governed by the law of 24 March 1989, which defined the respective powers of the Board of Directors and the Executive Committee. Pursuant to Article 8 of this organic law, "the Board of Directors defines the Bank's general policy and is responsible for management control of the Executive Committee. All administrative acts and measures necessary or relevant to the Bank's purpose fall within the responsibility of the Executive Committee, subject to such approvals as are required by virtue of this law".

BOARD OF DIRECTORS (as at 01/03/2019)

CHAIRMAN	Camille FOHL
VICE PRESIDENT	Elisabeth MANNES-KIEFFER (with effect 01/06/2018)
BOARD MEMBERS	Nima AHMADZADEH (with effect 01/05/2018)
	Paul ENSCH
	Manuel NICOLAS
	Jean-Claude REDING
	Jean-Pierre ZIGRAND
STAFF REPRESENTATIVE	Georges DENNEWALD
	Steve MELAN (with effect 01/05/2018)

SUPERVISORY COMMISSIONER

Bob KIEFFER

EXECUTIVE COMMITTEE

CHAIRMAN	Françoise THOMA	Chief Executive Officer
MEMBERS	Guy ROSSELJONG	Deputy Chief Executive Officer
	Aly KOHLL	Director
	Romain WEHLES	Director
	Doris ENGEL	Director

STATUTORY AUDITOR

Ernst & Young, Public Limited Company, Luxembourg

Approved by the Board of Directors during its meeting of 27 March 2019.

Luxembourg, 27 March 2019

For the Board of Directors

Camille FOHL
Chairman

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