BANQUE ET CAISSE D'ÉPARGNE DE L'ÉTAT, LUXEMBOURG

Head Office:
1, Place de Metz, Luxembourg

Luxembourg Trade and Companies Register (R.C.S.) 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, as amended (Memorandum A, no. 16 of 28 March 1989)

2021 Audited Consolidated Financial Statements

TABLE OF CONTENTS

PAGE

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

STATEMENT ON THE COMPLIANCE OF THE CONSOLIDATED FINANCIAL STATEMENTS

31 December 2021

Luxembourg, 30 March 2022

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 Banque et Caisse d'Epargne de l'Etat, Luxembourg as at 31 December 2021 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 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

Doris Engel
Executive Vice President
Member of the Executive Committee

Françoise Thoma
Chief Executive Officer
President of the Executive Committee

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

CONSOLIDATED MANAGEMENT REPORT
31 December 2021

SPUERKEESS GROUP CONSOLIDATED MANAGEMENT REPORT

William Telkes

Chief Economist

After a year of strict lockdowns and deep recession in 2020, the economic horizon began to brighten in 2021. Although the global economy continued to suffer from pandemic shocks, the increasing adaptability of the various economic players, government and central bank interventions and advances in vaccines and treatments helped ease uncertainties and thus improve the economic outlook. For full-year 2021 and based on recent projections by the International Monetary Fund, global GDP grew by nearly 6%. For the eurozone, the European Central Bank is forecasting real GDP growth of about 5%. In Luxembourg, economic activity remained robust despite a slight decline in the second quarter. GDP in volume terms, as calculated by STATEC, is expected to be close to 7% in 2021. This dynamism was also positive for the labour market with nearly 3% employment growth. The unemployment rate thus moved closer to the 5% threshold.

Like the global economy, the financial markets delivered strong growth with a double-digit performance. Although the environment continues to depend on the evolution of the pandemic, the economic recovery seen in 2021 enabled listed companies to post excellent results in most sectors. In the second half of the year, however, renewed inflation dampened some of the joy on the financial markets by focusing attention on the central banks and the direction of their monetary policy.

At the end of 2021, inflation was in fact the main shadow still hanging over the economic recovery. Since the end of last summer, inflation has surprised to the upside and could depress household consumption and business investment. Although supply chain woes, which have led to a supply/demand imbalance, should not be overlooked as a factor in this price index trend, the surge in energy prices is playing a major role in keeping inflation high. The increase in inflation is also affecting the local economy. Inflation rose in the final months of the year to exceed 5%. STATEC indicated that inflation, which triggered wage indexation last October, should have been 2,5% for full-year 2021.

Although the emergence of the new Omicron variant, high inflation and geopolitical tensions in recent months have sapped some of this economic momentum, leading to more moderate growth early this year, before the war in Ukraine we believed the economy would remain resilient in 2022 with growth rates somewhat closer to normal, but enabling most economies to return to, if not exceed, their pre-Covid-19 levels.

The invasion of Ukraine by Russian forces has severely tested the validity of these forecasts. Beyond the humanitarian aspects, the economic consequences could not be reliably quantified before this document went to press. The rapid rise in energy and commodity prices and their impacts on other prices will lift consumer inflation to levels well above central bank targets. Consumers’ loss of purchasing power and the decline in profitability in certain sectors subsequent to this increase, the effects of sanctions and the impact on consumer and industrial confidence will dampen economic growth in 2022.

“Preparing the bank for tomorrow means considering today’s major trends to better understand the future. Covid has fostered extensive use of remote banking services and changed how Spuerkeess’s employees work together. Open banking has created new competitors for banks.”

Fred Giuliani

Senior Vice President & Head of Department

Information Technologies

Our objectives	**Our results**
Provide our customers and employees with the best digital experience Streamline internal processes Introduce new IT-based collaborative models	More than 130 IT projects completed in 2021 29 internal processes analysed for simplification 20% increase in our cybersecurity investments
Our challenges	**Our solutions**
Cybersecurity Regulatory requirements New competitors	Constant additions of new S-Net features Collaborations and partnerships with external actors Adoption of new collaborative solutions

The banking world is undergoing a rapid transformation. The Payment Services Directive 2 (PSD2) laid the groundwork for the liberalisation of the European banking market and, while the impact has been minimal so far, the medium-term effects will soon be felt due to the arrival of new competitors such as neobanks and the IT giants. Caught between increased regulatory pressure on the one hand and the emergence of new competition on the other, Spuerkeess is working to build its own digital model by undertaking an internal digital transformation and making products available that meet the needs of business and retail customers, both of which are increasingly demanding an all-digital user experience.

In this environment, the IT department cannot merely provide technical solutions but must also partner with the business units and sometimes even be the driving force behind the digital transformation process. This transformation naturally also requires additional resources to guarantee cybersecurity; this is necessary to keep Spuerkeess and its customers’ assets safe and maintain its partners’ trust.

Within the Bank, the introduction of new collaborative tools has created a better work experience for employees, which indirectly means better service for customers.

The digital offering available in our S-Net solution has been expanded. Students can apply for student loans directly in S-Net and the funds are available immediately. This is all based on blockchain technology. Similarly, instant payments have been introduced and allow customers to transfer funds to other banks in mere seconds. The use of electronic signatures has been expanded to many new documents, making it possible to communicate with customers digitally and securely. In terms of data analysis, Spuerkeess has developed new models to better understand customers' needs and thus provide them with products that are better suited to their particular circumstances.

The transition to digital requires the creation of appropriate banking products and services which can then be distributed and used directly through digital channels. This means streamlining the offering and ensuring a high degree of standardisation. Products and services must also be accessible 24/7. Cloud solutions are used to make sure processes are highly automated and readily available within the Bank. The digital transformation has also prompted us to establish new partnerships with third parties and fintechs.

"The Organisation business unit faced two challenges in 2021. First, the evolution of the health crisis required constant coordination of the continuity plan and, second, the launch of the Spuerkeess 2025 strategic plan pulled some of our teams to help the business units with their project rollouts. We have our teams' flexibility to thank for our success in meeting these challenges!"

Cécile Guillaume

Deputy Head of Business Unit

Organisation

Our objectives	**Our results**
Help Spuerkeess meet its strategic objectives Coordinate work that affects multiple business units Ensure Spuerkeess's business continuity Improve data quality and risk reporting management	Management of 15 projects, including Spuerkeess Direct Coordination of 6 project programmes or portfolios, including ESG Coordination of Spuerkeess's continuity plan in response to the Covid-19 pandemic Publication of Spuerkeess-wide process standards
Our challenges	**Our solutions**
Adapt to a wide range of issues Maintain collaborative work methods despite remote work	Facilitation of collaborative workshops Structuring of work processes Project management expertise

The Organisation business unit puts its expertise in project coordination, facilitation, structuring and management to work for Spuerkeess's business units. We are in involved, in particular, in Bank-wide issues.

The new Spuerkeess 2025 strategic plan was launched in 2021. Our role in this respect is to help the various business units execute and monitor their strategic projects. On the commercial front, the pandemic changed how our customers like to work with their bank. The introduction of Spuerkeess Direct at the end of 2019 made it possible, in 2020, for our customers to perform remotely the transactions they used to see a teller for. We continued this effort in 2021 and also facilitated remote advice by implementing new technologies that allow advisors and customers to share their screens.

To meet the strategic challenge of improving our service and responding more quickly to our customers' demands, we need to modernise and optimise our work processes. We worked towards this goal in 2021, first by centralising all of the Bank's processes in a single up-to-date set of standards to make it easier to understand, analyse and identify possible optimisations. Second, we initiated optimisation projects that will start to have a visible positive impact in 2022.

Its status as state bank and systemically important bank makes regulatory compliance a priority for Spuerkeess. For several years, we have helped the Compliance function implement and monitor action plans intended to ensure Spuerkeess's compliance with new regulations. In 2021, we combined our expertise in regulatory compliance and process optimisation to launch an ambitious modernisation of our anti-money laundering and counter-terrorist financing programme. We also work regularly to ensure compliance with regulatory requirements related to data quality management, continuity risk and updates to Spuerkeess's physical security system.

These are just a few examples, but we can also cite our contributions to the implementation of new governance for the Bank's products, the ESG programme, the work to be done to comply with the Single Resolution Board requirements, and the modernisation of the fire-detection system at the head office and the Bank's video surveillance system.

This was all made possible by the flexibility of our teams, which have been able to transform the constraints of the health situation into an opportunity to work differently but just as effectively, in collaboration with all of Spuerkeess's business units.

“In 2021, I became the first female “boss” of the Walferdange Finance Centre team, reflecting the Spuerkeess Executive Committee’s efforts to promote female leadership. Our teams are committed to working closely and effectively despite the challenges posed by the pandemic.”

Jeanne Faber

Head of Walferdange

Finance Centre

Our objectives	**Our results**
Uplift employees and strengthen team spirit Develop a commercial approach for housing	150 videoconferences held with our customers 250% increase in new “Activmandate” discretionary management mandates
Our challenges	**Our solutions**
Maintain a big picture view of the team while teleworking Digital communication with customers who are not online	Maintain close relationships with the team and customers through new digital platforms

Like 2020, last year was a time of significant change in a world reeling from an unprecedented health crisis. It was therefore particularly important that we maintain close relationships with our customers so we could reassure them, support them and make them our primary focus. As the branch network is often the first point of contact with a customer, we had to offer our customers different means of communication to manage the relationship remotely and direct them to digital solutions such as remote advice, shared-screen videoconferencing, S-Net and Spuerkeess Direct. Some of our customers needed our help to transition to our online banking services.

In a banking environment where digitalisation has gained momentum and neobanks have increased their presence and impact, we need to differentiate ourselves with customised, high-quality service whether in person or through digital channels. During the health crisis, our objective has therefore been to win our customers’ loyalty by offering high-quality advice, a variety of investment alternatives and tailored financing advice.

Digitalisation gives our customers access to almost unlimited information. To better meet their needs and train specialists in this business, in January 2021 we introduced our commercial approach for housing.

It was a real challenge to manage, coach and support a team remotely, while maintaining flawless service quality without losing sight of the big picture. We all faced a steep learning curve with the launch of telework, which affected our employees and our customers. As their leader, my goal was to help my teams develop professionally and find solutions in this new work environment.

“In 2021, our efforts continued to focus on working with our customers to develop new ways to interact in person or remotely, whether for advice or everyday transactions.”

Claude Hirtzig

Senior Vice President & Head of Department

Retail & Private Banking

Our objectives	Our results
Build relationships on all our channels Use innovation to improve customer satisfaction	10% growth in S-Net users Fund investment plans up 200%
Our challenges	**Our solutions**
Support all customers on digital channels Help customers with their energy transition efforts	Remote student loan applications Development of investment solutions

After the organisational and operational challenges in 2020 related to the health crisis, in 2021 we were able to adapt and allow our new interactions with customers to take hold permanently.

As a local bank, we worked with our customers to develop new ways to communicate, whether they needed advice or wanted to perform everyday transactions. For the latter, the rapid development of new features for our different S-Net applications led to a more than 10% increase in the number of customers using these channels in 2021. Between remote onboarding and the digital opening of day-to-day banking products, customers can now manage most routine banking activities independently and flexibly, and can even integrate bank accounts with other financial centre banks into S-Net.

However, availability and convenience remain the focus of our commitment, particularly when it comes to specialised advice. Spuerkeess thus reaffirms its position as a market leader in real estate financing, a sector where integrating information and energy advice helps customers make property acquisition and renovation decisions and gives them better access to government assistance. We continue to innovate in other areas of financing as well: adapting our processes has since allowed us to finalise most consumer credit applications immediately, in branches and on S-Net. For student loans, we signed an agreement with the Ministry of Higher Education to make the loan application and payment processes entirely digital so that foreign students do not need to actually go to the Bank, for example.

In recent years and in a particularly low interest rate environment, Spuerkeess's personal bankers have focused on financial education in relation to the financial markets. In line with customers' risk management goals, openings of investment fund investment plans more than tripled in just one year.

Momentum was even greater for the Private Banking activity. At the product range level, the offering was expanded at the end of the year to include a new type of discretionary management, Activmandate Green, which invests exclusively in financial securities that meet the most advanced environmental criteria to reflect, here as well, the Bank's commitment to act as a transition enabler.

“The creation of a team and product dedicated to business succession meets an important market need.”

Nobby Brausch

Senior Vice President & Head of Department

Corporate Banking & Public Sector

Our objectives	**Our results**
Implement the priorities in the Spuerkeess 2025 strategic plan in the corporate sphere	Implementation of the new “business succession” service Implementation of the new “Greater Region” project
Our challenges	**Our solutions**
Find the resources to work effectively and efficiently on the services and projects referenced above while continuing to be available to our customers and ensure the high quality of service they have come to expect from us	An offering that solves one of the major challenges often faced in business succession matters An offering that enables resident companies to expand to the Greater Region

The Spuerkeess 2025 strategy is centred around the life cycle of its corporate customers. Two key phases of a company’s life are geographic expansion and succession.

Expanding across borders can be a source of new opportunities, or even of business diversification. Growth can be organic or external.

As a key leader in Luxembourg, Spuerkeess helps its business customers with all their efforts. It can put them in touch with chambers of trade or a notary and offer financial support that meets their specific needs.

Spuerkeess can thus assist with the financing of takeovers of existing entities in the Greater Region as well as with the financing of investment plans to create subsidiaries abroad. Spuerkeess continues to support its customers abroad by financing their operating cycle and managing their cash.

Business succession is another key phase that requires customised support and for which it is wise to seek out specialists to ensure a smooth transition. We can help by providing advisory and support services for the buyer or the seller.

Spuerkeess finances both full and partial acquisitions. In a business succession, the buyer often lacks capital. Spuerkeess's subordinated loan is the solution to this problem.

The client base targeted is that of mid-sized Luxembourg companies, incorporated as capital companies and having solid track records.

Eligible transactions are full acquisitions and partial acquisitions (and even the acquisition of minority interests).

“Regulatory requirements and negative interest rates continue to pose a number of problems. The digitalisation of our work processes and our strategic partnerships are helping us meet these challenges.”

Alain Uhres

Vice President & Head of Business Unit

Institutional Relationship Management

Our objectives	**Our results**
Ensure customer satisfaction Personalise the customer relationship with an experienced and responsive sales representative Offer customised service to meet the demands of institutional clients	EUR 87 billion in assets under custody 14,1% growth in assets under custody Significant increase in private asset fund assets in the custodian bank
Our challenges	**Our solutions**
Regulatory requirements Negative interest rates Restructuring of the team and tools to optimise operational and administrative flows	Strategic partnerships Acceleration of digitalisation Regular review of the services and products offered to customers and expansion of the range to meet customers’ needs Cooperation with BCEE Asset Management

Our Institutional Relationship Management unit works with institutional clients, which consist mainly of investment funds, banks, insurance companies, management companies, family offices, external asset managers and governmental institutions.

The main objective in 2021 was to provide personalised, high-quality customer service and increase our turnover despite the ongoing health crisis. Regulatory requirements continue to proliferate, leading to a significant administrative burden.

On the financial front, the objective was to increase turnover despite the negative interest rates set by the European Central Bank. These rates have had an adverse impact on our Bank’s profitability, which forced us to revise the conditions offered on our customers’ cash accounts.

To further broaden our range of products and services for our institutional clients, particularly in terms of sustainable investments, we joined forces with BCEE Asset Management to launch a new “Global

Diversified Sicav - Defensive GREEN" sub-fund which meets environmental, social and governance (ESG) sustainability criteria.

Our unit is pursuing projects to digitalise and optimise our work processes, including those used to establish new customer relationships, conduct ongoing due diligence of existing customers, and prepare customer reporting.
Thanks to our strategic partnerships with companies specialising in private asset funds, we saw strong growth in asset volumes.

At 31 December 2021, institutional clients held total assets of EUR 87 billion, including assets in the form of securities under custody, cash and private asset funds. Institutional client assets thus rose by 14,1%.

“The legal profession is constantly evolving. The lawyers’ role is shifting more towards assisting the business units, from the outset, with innovative projects. Adapting KYC procedures to create a seamless digital interaction with customers is a top priority.”

Martine Kayser

Deputy Head of Business Unit

Legal, Client Acceptance & Litigation

Our objectives	**Our results**
Adapt the tools needed for the legal function to operate Implement KYC processes for the purpose of ongoing compliance, efficiency and transparency	Optimisation of contractual processes by creating an internal contract database Transformation of internal and external exchange flows with regard to KYC obligations
Our challenges	**Our solutions**
Manage the proliferation of regulatory requirements Needs arising from the crisis and the establishment of fully remote customer relationships	Control of legal risk with a preventive approach Optimisation of documentation processes with a more digital approach

Our business unit’s activity covers several areas, which can be summarised as follows:

- Analysis and verification of customer documentation from a know-your-customer (KYC) perspective during the onboarding process;
- Monitoring of customer files with respect to tax and AML/CFT regulatory requirements over the entire life cycle of the relationship;
- Legal support for the Bank’s regulatory and commercial projects, preparation of opinions, contract reviews, management of legal and estate matters;
- Monitoring of customers who have defaulted on their payments.

Banking and financial regulations have proliferated since the 2008 crisis and gaining a good command of this legal arsenal is without a doubt the main challenge for the in-house legal function.
Similarly, the way we practice our profession is being transformed, given the shifting expectations of regulators, our colleagues in various business units and our customers. This is clear from several developments in 2021.

We can cite, for example, the implementation of a critical tool for efficient management of contractual documentation. We now have an in-house electronic contract management database that meets the supervisory authorities’ requirements and allows business units and lawyers to coordinate their contract monitoring.

In terms of legal risk management, for which the legal function is the first line of defence, we are seeing a growing shift from a remediation-based approach to one that relies on risk anticipation and prevention. The lawyers' role is focused more on assisting the business units, from the outset, with innovative projects and the creation of new products and services. In 2021, these included opening up new digital communication channels with customers due to the health crisis, developing our activities in a cross-border context, and contracting out new IT work.

With respect to customer documentation management, the years-long transformation of customer communication methods has posed major process adaptation challenges and has culminated in the take-up of a growing number of digital channels and media and the systematic use of electronic data exchanges. Also worth noting are the regulator's increased data verification and processing requirements, as well as our stated intention to offer customers modern, efficient and transparent resources.

These developments, as well as the need to meet the immediate and priority needs that arose during the health crisis due to the significant reduction in in-person customer contact, led us to adapt our KYC procedures to create a seamless and more digital interaction with our customers and to optimise our internal processing flows. Efforts will continue in the future to improve the digital tools and interfaces that we will be able to make available to our customers.

“Risk culture is developed at Spuerkeess through values, beliefs, knowledge and understanding about risk, shared by all employees.”

Catherine Thomas

Staff Member

Risk Management

Our objectives	Our results
Control operational risks Improve processes to increase performance Instil a strong risk culture	Better understanding of risks and improved reporting Strengthening of the risk management framework Better ability to withstand operational incidents
Our challenges	**Our solutions**
Mounting regulatory requirements Effectiveness of the risk management processes Maintaining the risk mindset Emergence of new risks	Employee training and awareness-raising Collaboration and horizontal communication Integrated risk management software

The Risk Management business unit faced many challenges in 2021. The same was true for all the business and support units, which were also in great demand. As the first lines of defence, these units were responsible for anticipating, identifying, assessing, reporting, monitoring and managing all the risks to which they are exposed because of their activities. As the second line of defence, the Risk Management (RIM) business unit is responsible for overseeing this risk management. The RIM business unit is also responsible for helping Management with risk management, by ensuring independent control of the risks to which the Bank is exposed, including operational risk.

An analysis of high-profile cases where significant losses occurred due to failures of processes or systems or due to human error or events external to an organisation shows that, most of the time, appropriate management of operational risk would have reduced the impact of these incidents, or even prevented them. It therefore comes as no surprise that regulators around the world are requiring banks to strengthen their due diligence and properly address operational risk in a holistic manner.

In 2021, Spuerkeess therefore implemented new operational risk management practices. These included:

- Changes to and continuous development of the operational incident collection process and a key tool to support incident management. This helped improve data quality, incident monitoring and the reporting to the Executive Committee.

- Implementation of processes for risk treatment, monitoring and action plan analysis and recommendations to address any weaknesses identified. These processes target risk mitigation and improved resilience to incidents with the aim of reducing the Bank's risk level.

- Improvements in the methodology for identifying and assessing operational risks, mainly by:
    - Strengthening the risk control self-assessment (RCSA) methodology, which seeks to identify and assess the potential risks to which the Bank is or could be exposed.
    - Implementing the control testing approach, which aims to test the effectiveness of key controls to mitigate major risks, i.e. more than 400 controls identified in the RCSA.
    - Developing and implementing the scenario analysis practice, which involves analysing and documenting rare but plausible events that could have significant impacts for the Bank. This forward-looking approach aims to identify these events and assess their likelihood and potential impact.

By adopting these different practices, the Risk Management business unit has strengthened both the framework and the processes that support operational risk management.
In the coming years, every Spuerkeess employee will be encouraged to uphold these risk management and control principles on a daily basis to reduce operational risk in the short, medium and long term by focusing on continuously improving Spuerkeess's processes, operating systems and organisational structures.

Operational risk management affects us all!

OUR RISK MANAGEMENT POLICY

To ensure effective risk management at all levels, we have implemented governance based on the concept of the three lines of defence. Spuerkeess 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 Bank's governance model, while the Internal Audit function represents the third line of defence. The Bank has opted for a "defensive" risk profile defined in its 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 Spuerkeess's overall risk situation in detail. The levels of risk to which the Bank is exposed are measured using a set of strategic indicators, operational metrics, and macroeconomic indicators.

Risk appetite is defined through surveillance levels set for the different indicators and transposed into a set of limits intended to manage and control Spuerkeess's various risks.

The ICAAP and ILAAP processes are used to ensure that the Bank has adequate capitalisation and liquidity to pursue and grow its business activities.
Risk management is supervised by various working groups and committees, at both the Executive Committee level and the Board of Directors level. Risk management is described in detail in note 6 to the financial statements as at 31 December 2021. Several categories of risk need to be considered:

Credit risk

Credit risk is the risk of financial loss on the Bank's receivables due to a deterioration in the credit quality of borrowers, which could even result in the default of a borrower or the inability to recover assets deposited with third parties. Each material 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 assigned an internal rating which is a direct component of the credit risk management system. It is one of the key parameters used to set limits or grant new financing.

The Risk Management function is responsible for the initial and recurrent validation of all internal rating models, but without any involvement in the day-to-day management of credit files, thus ensuring independence from the business units, which are the first line of defence. Decisions on loans to the national economy are made by the various credit committees according to the customer's overall credit outstanding.

Residential mortgage loans account for more than half of Spuerkeess's loan and credit portfolio. Credit risk is assessed based on the customer's overall solvency and repayment ability as well as the existence of real guarantees.

For international commitments, an initial investment is made only with counterparties classified as investment grade, excluding counterparties rated BBB-. For non-financial entities, priority is given to counterparties from Organisation for Economic Co-operation and Development (OECD) countries, mainly in Europe and North America. Outstanding amounts are subject to counterparty risk monitoring, sector and systemic risk monitoring and regular checks based on updated financial analyses and proposed adjustments to limits per counterparty. We also apply a country limit system for all non-Luxembourg countries in which the Bank is active. These limits are reviewed annually.

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, we have opted to work through direct members, known as clearing brokers.

The potential impacts of the Covid-19 pandemic on supply chains and thus on the Bank's portfolios were analysed in 2021. Although the Bank has no direct exposures to Russia, Belarus or Ukraine, the war that began on 24 February 2022 could have an impact on price stability, economic growth in Europe and the quality of some of the Bank's assets. Analysing and managing the risks related to this crisis will be one of the challenges for 2022.

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. Spuerkeess's market risk management policy distinguishes between mismatch risk arising 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.

Interest Rate Risk in the Banking Book (IRRBB)

IRRBB refers to the current or prospective risk to which the Bank's capital is exposed due to adverse movements in interest rates. We spent the last few years developing internal models to assess the interest rate risk associated with the Bank's activities. These models have now been implemented in a tool used to manage interest rate risk based on specific metrics and in accordance with a predefined limit framework. Compliance with these limits is monitored by the first and second lines of defence. Very low interest rates and the impacts of this situation on interest rate risk management and profitability remain a major challenge for the Bank.

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 in a position of excess liquidity.

The Bank constantly monitors liquidity risk on the basis of maturities, including both a 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 2021, the LCR was 176,9%, well above the minimum threshold of 100%. 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, is also one of the indicators tracked in the Risk Appetite Framework. The NSFR at 31 December 2021 was 134,7% and was thus well above the regulatory minimum threshold of 100%.

Leverage ratio

The leverage ratio measures the proportion of core capital to the Bank's exposures without taking collateral into account and adding on- and 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 8,8% as at 31 December 2021, well above the regulatory minimum of 3,0%.

Operational risk

Operational risk is defined as the risk of losses resulting from an inadequacy or a failure of processes, personnel, internal systems, or external events, including legal risk. The roles and responsibilities of the first and second lines of defence are highlighted in the Operational Risk Management Policy. We aim to reduce operational risk by continuously improving our processes and organisational structures. The main challenges in 2021 were implementing new control and monitoring processes at the Bank level.

Information technology (IT) risk and cyber risk

An independent entity within the Risk Management function supervises IT and cyber risk management. An Information Security Officer is responsible for overseeing IT security, reports to the head of the Risk Management function and has a direct reporting line to the Chief Risk Officer. This IT and cyber risk management structure allows the Bank to operate within the limits set in the Risk Appetite Framework (RAF). The main challenges in 2021 were supporting and managing the various IT projects from a risk perspective. Implementing the cyber protection plan was also a strategic priority.

AML/FT risk

As part of the fight against money laundering and the financing of terrorism (AML/FT), the Compliance business unit performs analyses of customers or groups of customers if there are any doubts or suspicions about a transaction's legality or legitimacy. Based on the results of these analyses and the seriousness of the facts, the Compliance business unit takes any necessary measures. This may result in the closure of the matter, closer monitoring of transactions, the filing of a suspicious activity report with the Financial Intelligence Unit and/or the termination of the business relationship. The behavioural changes brought on by the pandemic also led to an increase in certain types of fraud, which prompted Spuerkeess to further strengthen its systems and its due diligence in an ongoing effort to protect its customers.

Compliance risk reporting and management

As it does every year, the Compliance business unit revised the risk mapping to measure Spuerkeess's exposure to the compliance risks associated with its banking and financial activities. Based on this mapping and the changes in the regulatory landscape, the Compliance business unit is developing a multi-year permanent control plan to ensure compliance with the legal and regulatory requirements applicable to Spuerkeess's activities.

Internal fraud risk management

Internal fraud risk management requires both prevention and control. Thus, our staff are actively educated on the importance of complying with the current Code of Conduct, conflict of interest policy and whistleblowing procedure. The Compliance business unit is thus responsible for monitoring staff transactions and investigations in the event of a claim involving a Spuerkeess agent.

Data Protection

Protecting the personal data of our customers, staff and suppliers is a core concern. The Data Protection Office is committed to providing all employees with regular training on this important topic and consequently participates in every project and every new product or service in order to ensure data protection by design. Under this approach, data confidentiality and security are taken into account as part of the design and development process. Regular monitoring and controls, along with detailed and well-communicated procedures, make it possible to detect any risk of this nature and propose quick corrective measures, if necessary. The data protection policy is updated frequently and posted on our website.

Financial risk and hedge accounting

The consolidated financial statements of the 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 special purpose 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 the old 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 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. The calculation is performed monthly.

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.

Compliance with CRR 2

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. In 2021, the Bank took the necessary steps to comply with Regulation (EU) 2019/876, which entered into force on 28 June 2021.

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 financial year 2021, which details how the Bank is organised to ensure that all the risks to which the institution is or could be exposed are anticipated, detected, measured, controlled and reported, is available on the Bank's website.

OTHER ACTIVITIES

Operating and support activities

Operating and support activities 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. We continue our efforts to improve our systems and digitalise our processes in order to adapt to market developments and increase our efficiency. Support activities cover a wide variety of areas, such as Bank finances, legal and regulatory matters, organisation, marketing, logistics and IT.

Regulatory activities

The primary regulatory issues that the regulatory watch team actively supported in 2021 were as follows:

- IBOR reform: The benchmark regulation established by the European Union imposes new requirements on companies that are administrators of, contributors to or users of a broad range of interest rate, currency, security and/or commodity indices and/or benchmarks. Spuerkeess, which is not a benchmark administrator, had to comply only with the requirements applicable to contributors to and users of benchmarks.

- Working from home: CSSF Circular 21/769, which covers this topic, seeks to define the governance and security requirements for implementing and using telework in a post-Covid-19 context. The work-from-home governance framework Spuerkeess has already developed could be implemented quickly once the Covid-19 pandemic is over.

- RFT: This refers to the law of 10 July 2020 which establishes a register of fiduciary contracts and trusts (RFT) under Luxembourg law. This law affects Spuerkeess:
    - as a fiduciary, which is duty-bound to protect or even increase the value of the assets transferred to it in accordance with the provisions of the trust agreement;
    - in its role as a professional subject to anti-money laundering regulations, which must be able to fulfil its obligation to identify trusts and fiduciary contracts based on accessible information.

  The teams are currently awaiting publication of the corresponding Grand Ducal Regulation before continuing their compliance work.

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 holds 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.

Since 1989, Spuerkeess has been a 40% shareholder of the Lalux S.A. group.

After its acquisition in 2021 of some of the shares held by another financial centre bank, Spuerkeess now holds 25,35% of the capital of Société de la Bourse de Luxembourg S.A., of which it is a founding member and the largest shareholder.

In collaboration with three other players in the Luxembourg financial centre, Spuerkeess participated in the 2018 creation of LuxHub S.A., in which it holds 32,50% of the capital.

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 10,88% interest in the share capital of SES S.A. in the form of Class B shares. These Class B shares grant a voting right corresponding to this stake, in accordance with the "one share, one vote" principle. Spuerkeess also holds Class A shares representing 0,82% of the share capital of SES S.A. The Class A shares also grant a voting right corresponding to this stake, in accordance with the "one share, one vote" principle. In terms of the economic right, SES S.A.'s by-laws specify that a Class B share gives the holder the right to a dividend that is 40% of the dividend paid for a Class A SES S.A. share.

In the air transport sector, Spuerkeess holds a 21,81% equity interest in the capital of Luxair, Société Luxembourgeoise de Navigation Aérienne S.A., which is active in air navigation, tour operation, cargo handling and catering, and a 10,91% equity interest in the capital of Cargolux Airlines International S.A., which is one of the world's largest all-cargo airlines.

The Bank also holds a 12% stake in the capital of Encevo S.A., the holding company for Luxembourg's market-leading energy group.

At the time of SMS Group's takeover of all of Paul Wurth S.A.'s industrial activities in 2021 through SMS's acquisition of the respective stakes held by the Luxembourg State, SNCI and Spuerkeess in the capital of Paul Wurth S.A., Paul Wurth S.A.'s real estate activities were transferred to Paul Wurth Real Estate S.A. Spuerkeess continues to hold a 10,98% stake in Paul Wurth Real Estate S.A. and will thus contribute to the development and sale of the properties held by this company in Luxembourg City.

Through its 11% stake in the capital of Société Nationale des Habitations à Bon Marché S.A. (S.N.H.B.M.), a national player specialising 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.

In addition to these major shareholdings, Spuerkeess contributes to the economic development not only of the country but also of the Greater Region by acquiring smaller stakes in Luxembourg and cross-border companies that provide support to SMEs across the entire region. Examples include CD-PME S.A. for Luxembourg companies, in which Spuerkeess has a 10% stake, and EUREFI S.A. for companies in the border region, with the Bank making an 8,76% investment. At the European level, Spuerkeess is the only financial institution in Luxembourg to hold a stake in the European Investment Fund (EIF), an institution that is part of the European Investment Bank (EIB) group and supports SMEs across Europe by issuing bank guarantees. The EIF, or the EIB Group more specifically, has set ambitious targets regarding its role in the fight against climate change, which also represents one of the two major pillars of Spuerkeess's sustainable development strategy. A breakdown of the ownership percentages in investments in associates and subsidiaries is presented in Note 4.9 to the 2021 annual financial statements.

Sustainable development strategy

Since 2017, Spuerkeess has published a non-financial report in accordance with the standards of the Global Reporting Initiative (GRI) detailing Spuerkeess's strategy and activities in the area of sustainable development.

THE BANK'S FINANCIAL RESULTS AT 31 DECEMBER 2021

The Spuerkeess Group comprises Spuerkeess, Luxembourg as the parent company and its fully consolidated subsidiaries and associates consolidated using the equity method. At EUR 668,4 million as of 31 December 2021, the Group's bank margin was up EUR 60,7 million (10,0%) compared with the 2020 financial year.

The Group's net interest margin rose by 2,4% and continued to be affected by the increase in deposits in a low or negative interest rate environment. The European Central Bank's targeted longer-term refinancing operations (TLTRO) helped support the business and consumer bank lending activity. In terms of its capital markets activities, the still low, if not negative, interest rate environment continued to adversely affect the Bank's opportunities for investment and maturity swapping in 2021.

Fee income was up 14,1% due mainly to the increase in fees from customer securities activities, the favourable change in income from current accounts and credit cards, asset management and fees for administration and custody of securities.

Income from the Group's shareholdings was EUR 23,1 million at end-2021, up EUR 7,2 million (45,4%) from the previous year, as the dividends received from some of the Group's parent company's strategic holdings were higher than in the past.

Income from financial instruments increased from EUR 17,9 million at the end of 2020 to EUR 42,5 million as at 31 December 2021. The increase in this item stemmed in large part from realised and unrealised gains on financial instruments measured at fair value through profit or loss, as well as from the increase in foreign exchange income.

Other operating income and expenses fell to EUR 7,7 million at year-end 2021 from EUR 12,6 million at the end of 2020. The nature of its composition makes this item volatile and the change is mainly due to specific non-recurring factors.

Total general expenses rose by 8,8% mainly due to increased investments in IT and the resumption of certain activities in 2021 that had been sharply curtailed during the spring 2020 lockdown. Structural growth in personnel expenses and in allowances for impairment of tangible and intangible assets made a smaller contribution to this trend.

The cost of risk had a considerable influence on the trend in Spuerkeess income in 2021. In light of the improvement in the economic environment, the Bank was able to record reversals of value adjustments and provisions totalling EUR 31,6 million versus an allocation of EUR 66,8 million in 2020. This reflects the Bank's cautious approach to provisioning, which resulted in the creation of additional value adjustments in the form of input overlays in the calculation models in 2020. Given the economic improvement in 2021, these management overlays were significantly reduced.

Spuerkeess made its contribution to the national compartment of the *Fonds de Résolution Luxembourg* (Luxembourg resolution fund, or FRL), which has gradually merged over an eight-year period with the single resolution fund established by the Single Resolution Mechanism. It also made its contribution to the *Fonds de Garantie des Dépôts* (Deposit Guarantee Fund, or FGDL) over the course of 2021. These two contributions combined totalled EUR 42,1 million for 2021.

The Group therefore posted net income of EUR 329,1 million for the 2021 financial year, up EUR 157,1 million (91,3%) from net income of EUR 172,0 million in the prior year. This increase in income should be viewed in the light of the extraordinary events that occurred over these two years, as well as the exceptional measures implemented as a monetary policy response. Despite these events, the performance by Spuerkeess's different businesses is reflected in the growth in interest income and fee income. Furthermore, the progress made on the digital transformation helped curb the rise in general expenses.

ANALYSIS OF MAIN BALANCE SHEET ITEMS

The balance sheet totalled EUR 53.424,9 million at 31 December 2021, an increase of EUR 3.193,5 million compared with 31 December 2020, mainly due to the increase in deposits from retail, business and public sector customers.

On the assets side of the balance sheet, the "Cash and sight accounts with central banks" line increased by EUR 2.645,6 million to EUR 9.773,7 million at end-2021, pointing to the surplus of customer deposits relative to the opportunities for investment and loan origination that are consistent with Spuerkeess's risk appetite.

Outstanding fixed-income securities recognised at amortised cost amounted to EUR 13.821,9 million, down EUR 211,6 million compared with 31 December 2020.

The outstanding amount of financial assets mandatorily recognised at fair value through profit or loss totalled EUR 632,5 million, a decrease of EUR 176,6 million compared with 31 December 2020. This item includes financial instruments that do not meet the necessary conditions for measurement at amortised cost and which are measured at fair value through profit or loss. The reduction in outstandings can be attributed to redemptions of securities without reinvestment, following the decision to reduce this type of financial asset.

The outstanding amount of variable-income securities recognised at fair value through the revaluation reserve was EUR 1.125,0 million, up EUR 266,3 million compared with 31 December 2020, due to the increase in the measurements of certain shareholdings.

Compared with 31 December 2020, the outstanding amount of loans to credit institutions decreased by EUR 486,6 million to EUR 1.346,6 million at 31 December 2021. This item also includes the Bank's deposits with other banks, whether or not they are collateralised with securities.

Outstanding customer loans totalled EUR 25.246,7 million at 31 December 2021, an increase of EUR 1.147,8 million since 31 December 2020. 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. Commercial momentum remained strong despite the health crisis environment.

On the liabilities side of the balance sheet, issues of securities decreased by EUR 172,9 million to EUR 2.958,5 million at end-2021. This decrease stemmed from the Bank's decision to voluntarily reduce its Euro Commercial Paper (ECP) and US Commercial Paper (USCP) programmes.

Credit institution deposits increased by EUR 957,9 million and totalled EUR 6.934,7 million. This item also includes bank deposits collateralised with securities and liabilities received in TLTRO III operations.

Customer deposits totalled EUR 36.906,6 million, an increase of EUR 2.323,5 million. This growth was driven by strong inflows of deposits from corporates and individuals. Public sector deposits increased 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 Amended Law of 5 April 1993 on the Financial Sector, the Group reported its return on assets, which stood at 0,62% versus 0,34% in the prior year.

CHANGE IN OWN FUNDS

The Spuerkeess Group's total equity attributable to the parent company amounted to EUR 5.214,4 million as at 31 December 2021 compared with EUR 4.605,0 million at the end of 2020, i.e. an increase of 13,2%.

This EUR 609,5 million increase in equity consisted mainly of:

- a EUR 117,9 million gross increase in consolidated reserves;
- a EUR 157,1 million increase in 2021 income;
- a EUR 281,4 million increase in the revaluation reserve due to the integration of the valuation of shareholdings that are not included in the scope of consolidation. This mainly concerns the stake in the capital of Cargolux S.A. As the all-cargo air transport sector has had two exceptional years due to the pandemic, Cargolux's valuation, which reflects these performances, rose significantly;
- a EUR 40,0 million increase in the gains on disposals of variable-income securities;
- a EUR 1,3 million change in actuarial gains or losses on the employee pension fund due to the change in actuarial rates.

2022 OUTLOOK

European economies remained in the grip of the pandemic in 2021. Luxembourg's economy, with growth in GDP in volume terms estimated at 6,9% in 2021[1], across all sectors, weathered the health crisis well.

The new Covid-19 Omicron variant emerged in the first few months of 2022 but its health impact has been more limited. As a result, restrictions are being lifted in various European countries, including Luxembourg. While the evolution of the pandemic has received extensive media coverage, economic activity is facing supply woes and inflationary pressures which could significantly dampen the economy. Meanwhile, for 2021, the annual rate of inflation excluding sales calculated by Statec stood at 5,5%[2]. The supply chain disruptions that have caused the price of energy and some materials to rise are expected to persist in 2022.

In a similar vein, the conflict in Ukraine, which has led to higher energy and other industrial and food commodity prices, will further reinforce this trend. The economic and geopolitical impacts of these events are currently difficult to assess. Statec's most recent macroeconomic forecasts do not yet incorporate the impacts of the crisis in Ukraine into the country's macroeconomic parameters. Excluding this factor, the growth rate of GDP in volume terms is estimated at 3,5%[3] for 2022, close to its level before the health crisis.

As it has done in the past, the Bank's Executive Committee confirms that, in 2022, Spuerkeess will continue to assume its mission of supporting the national economy. As a responsible financial actor, Spuerkeess will continue to play a role in the sustainable development of the Luxembourg economy and contribute to the ecological transition, in accordance with the commitments it made when it signed the Principles for Responsible Banking and joined the Net Zero Banking Alliance.

[1]Source: Statec Conjoncture Flash - March 2022
[2]Source: Statnews no. 8 of 04/03/22
[3]Source: Statec Conjoncture Flash - March 2022

EVENTS AFTER THE REPORTING PERIOD

Russia's invasion of Ukraine exacerbated the volatility on the financial markets. Beyond the human catastrophe and the geopolitical aspects of this war, the economic fallout from the conflict is real. The energy shock we are experiencing has pushed inflation expectations higher, particularly in the short term. Growth expectations remain satisfactory, but estimates have been lowered, particularly in Europe. This is reflected in the growth expected by Bloomberg consensus: the expectation for the eurozone at 1 January was 4,2% but is now 3,5%. The central banks' reaction, the impact of the war on supply chains and high energy costs are the main factors behind these downward revisions.

Spuerkeess established a mechanism for continuous monitoring and immediately transposed the sanctions imposed by the international community against Russian institutions, including banks, and individuals. The Bank has no direct exposure to Russia or Ukraine and its indirect exposure is limited. Spuerkeess therefore believes that the impact of the economic consequences of this war on its financial position will be manageable but that it is too soon to quantify this impact after six weeks of ongoing armed conflict.

Luxembourg, 30 March 2022

For the Executive Committee

Doris Engel
Executive Vice President
Member of the Executive Committee

Françoise Thoma
Chief Executive Officer
President of the Executive Committee

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

STATUTORY AUDITOR'S REPORT
31 December 2021

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 and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at 31 December 2021, 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 2021, 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.

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 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 credit losses. They represent on the asset side of the balance sheet a net exposure of EUR 5,8 billion, including a balance of expected credit losses for individual risks of EUR 80,1 million[4].

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. This calculation is based on a categorization of all credits based on the change of 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 credit 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. For the year ended 31 December 2021, this process has continued to be impacted by uncertainties and risks arising from the Covid-19 pandemic.

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 complexity of the modalities to compute value adjustments for expected credit losses as defined by the IFRS 9 standard, the consequences of the COVID-19 pandemic and the related economic uncertainties which impact the assumptions affecting expected credit losses, as well as because of their importance for the presentation of the financial position and the statement of comprehensive income for the year ended 31 December 2021.

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 and the monitoring process of overdue exposures of the Group, the periodical review of such exposures, the elaboration of a list of specific provisions and consideration of others quantitative indicators, as defined by the Group.

We reviewed the internal documentation and made interviews with the heads of departments in order to validate the approach applied by the Group to categorize loans and advances to "Corporate" customers (staging) and to estimate the qualitative and quantitative data used as a basis for the computation of credit 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 the Management of the level of

[4] *Refers to the notes to the consolidated financial statements : 4.3 – Loans and advances at amortised cost - Customers*

specific impairment for these exposures.

To respond to the impact of the COVID-19 pandemic as well as its economic uncertainties, we have reviewed the Group's approach to identify high-risk industries and the impact on internal ratings. Our procedures included mainly a critical examination of the industries identified as high-risk as well as the specific reviews carried out by the Group of loans and advances granted to companies in these industries. We have also followed-up the evolution of the forborne loans and of the volume of loans in default to ensure that the latter are reflected in the calculated expected credit losses. Finally, we assessed the assumptions and macroeconomic factors included in the scenarios used for the computation of expected credit losses.

For loans and advances, subject to a specific impairment, 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.

The Executive Committee is also responsible for presenting and marking up the consolidated annual accounts in compliance with the requirements set out in the Delegated Regulation 2019/815 on European Single Electronic Format, as amended (“ESEF Regulation”).

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.

- Assess whether the consolidated annual accounts have been prepared, in all material respects, in compliance with the requirements laid down in the ESEF Regulation.

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 four years.

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 have checked the compliance of the consolidated annual accounts of the Group as at 31 December 2021 with relevant statutory requirements set out in the ESEF Regulation that are applicable to the consolidated annual accounts. For the Group, it relates to:

- Consolidated annual accounts prepared in valid xHTML format;
- The XBRL markup of the consolidated annual accounts using the core taxonomy and the common rules on markups specified in the ESEF Regulation.

In our opinion, the consolidated annual accounts of the Group as at 31 December 2021, identified as R7CQUF1DQM73HUTV1078-2021-12-31-consolidated, have been prepared, in all material respects, in compliance with the requirements laid down in the ESEF Regulation.

We confirm that the audit opinion is consistent with the additional report to the audit and compliance committee.

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.

Ernst & Young
Société Anonyme
Cabinet de révision agréé

Antoine Le Bars　　Bernard Lhoest

Luxembourg, 1 April 2022

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 2021

Consolidated balance sheet as at 31 December 2021

ASSETS in euros	Notes	31/12/2020	31/12/2021
Cash and sight accounts with central banks	4.1	7.128.135.655	9.773.732.257
Loans and advances at amortised cost – Credit institutions	4.2	1.833.195.892	1.346.631.751
Loans and advances at amortised cost – Customers	4.3	24.098.937.564	25.246.693.237
Financial instruments held for trading	4.4 4.12	138.717.034	235.242.636
Hedging derivative financial instruments	4.12	72.838.495	90.195.038
Financial assets mandatorily recognised at fair value through profit or loss	4.5	809.036.881	632.455.934
Fixed-income securities recognised at amortised cost	4.6	14.033.530.474	13.821.928.357
Fixed-income securities recognised at fair value through the revaluation reserve	4.7	18.042.494	17.534.901
Variable-income securities recognised at fair value through the revaluation reserve	4.8	858.764.091	1.125.045.988
Investments in associates accounted for using the equity method	4.9	449.059.026	571.515.457
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	4.13	373.811.797	156.504.244
Tangible assets for own use	4.14	273.210.953	257.157.451
Investment property	4.15	11.238.250	10.430.664
Intangible assets	4.16	32.276.745	34.200.035
Current taxes	4.18	64.730.961	70.166.184
Deferred taxes	4.18	25.333.516	26.057.864
Other assets	4.19	10.500.452	9.373.000
TOTAL ASSETS		**50.231.360.280**	**53.424.864.998**

LIABILITIES in euros	Notes	31/12/2020	31/12/2021
Deposits at amortised cost – Credit institutions	4.20	5.976.848.197	6.934.711.998
Deposits at amortised cost – Customers	4.21	34.583.084.637	36.906.630.696
Financial instruments held for trading	4.4 4.12	366.643.744	129.935.940
Hedging derivative financial instruments	4.12	1.112.075.207	827.678.271
Financial liabilities designated at fair value through profit or loss	4.22	172.175.873	165.001.798
Issuance of debt securities	4.23	2.959.242.843	2.793.469.938
Provisions	4.24	51.205.454	48.103.059
Other liabilities	4.25	39.157.731	33.982.358
Provision for employee benefits	4.26	363.233.280	367.952.878
Sub-total of LIABILITIES (before equity capital) to be carried forward		**45.623.666.966**	**48.207.466.936**

The notes on pages 53 to 176 are an integral part of these consolidated financial statements.

Consolidated balance sheet as at 31 December 2021 (continued)

EQUITY in euros	**31/12/2020**	**31/12/2021**
Sub-total of LIABILITIES (before equity capital) carried forward	**45.623.666.966**	**48.207.466.936**
Share capital	173.525.467	173.525.467
Consolidated reserves	3.766.051.922	3.883.953.142
Other items of comprehensive income	493.388.362	827.910.223
• *Variable-income securities recognised at fair value through the revaluation reserve*	*564.286.341*	*844.771.939*
• *Actuarial gains/losses relating to employee benefits*	*-372.393.914*	*-371.100.157*
• *Equity method adjustment*	*314.285.500*	*326.077.809*
• *Gains or losses on disposals of variable-income securities measured at fair value*	*-12.699.508*	*27.349.601*
• *Fixed-income securities recognised at fair value through the revaluation reserve*	*390.712*	*15.006*
• *Cash flow hedges*	*-480.769*	*796.025*
Income for the year	172.000.556	329.053.453
Sub-total of equity attributable to equity holders of the parent company	4.604.966.307	5.214.442.285
Non-controlling interests	2.727.007	2.955.777
Total equity	**4.607.693.314**	**5.217.398.062**
TOTAL LIABILITIES, including EQUITY	**50.231.360.280**	**53.424.864.998**

The notes on pages 53 to 176 are an integral part of these consolidated financial statements.

Consolidated income statement as at 31 December 2021

in euros	Notes	31/12/2020	31/12/2021
Interest income	5.1	389.744.197	399.163.945
Income from variable-income securities	5.2	15.881.134	23.095.100
Fee and commission income	5.3	171.507.671	195.689.468
INCOME FROM INTEREST, DIVIDENDS AND FEES AND COMMISSIONS		**577.133.002**	**617.948.513**
Income from financial instruments not recognised at fair value through profit or loss	5.4	-73.681	1.457.733
Income from financial instruments held for trading	5.5	3.922.827	-7.140.447
Income from financial instruments designated at fair value through profit or loss	5.6	-4.347.384	8.979.320
Income from financial instruments mandatorily measured at fair value through profit or loss	5.7	-9.740.389	9.615.378
Income from hedging transactions	5.8	7.067.433	397.531
Foreign exchange income		20.992.944	29.187.465
Income from derecognition of non-financial assets		97.731	234.774
Other operating income	5.9	15.385.398	10.810.701
Other operating expenditure	5.9	-2.760.159	-3.098.081
BANKING INCOME		**607.677.722**	**668.392.887**
Personnel expenses	5.10	-240.391.756	-246.718.484
Other general and administrative expenses	5.11	-88.012.973	-100.925.231
Cash contributions to resolution funds and deposit guarantee systems	5.12	-30.084.030	-42.132.567
Depreciation allowances for tangible and intangible assets	5.13 5.14 5.15	-42.530.886	-46.492.993
INCOME AFTER GENERAL EXPENSES		**206.658.077**	**232.123.612**
Net allowances for impairment of individual and collective credit risks	5.16	-27.457.405	24.285.798
Provisions	5.17	-19.768.834	6.992.856
Share in the profit of equity-accounted associates		45.813.491	121.155.292
INCOME BEFORE TAX		**205.245.329**	**384.557.558**
Tax on income from continuing operations	5.18	-30.971.361	-57.892.450
Deferred taxes	5.18	-362.396	4.503.574
INCOME FOR THE YEAR		**173.911.572**	**331.168.682**
of which income for the year attributable to			
- non-controlling interests		*1.911.016*	*2.115.229*
- equity holders of the parent company		*172.000.556*	*329.053.453*

The notes on pages 53 to 176 are an integral part of these consolidated financial statements.

Consolidated statement of comprehensive income as at 31 December 2021

in euros	31/12/2020	31/12/2021
INCOME FOR THE YEAR	**173.911.572**	**331.168.682**
Items not reclassified in net income subsequently	**32.342.070**	**320.921.265**
Actuarial gains/losses relating to employee benefits	-29.971.766	1.723.630
Share in the profit of equity-accounted investments in associates	-958.803	11.792.309
Variable-income securities recognised at fair value through the revaluation reserve	53.889.212	308.265.911
° *Variation in measurement results*	*71.240.406*	*283.539.536*
° *Income from sales*	*-17.351.194*	*24.726.375*
Impact of deferred and current taxes	9.383.427	-860.585
Items to be reclassified in net income subsequently	**-961.380**	**901.088**
Fixed-income securities recognised at fair value through the revaluation reserve	568.438	-500.540
Cash flow hedges	-1.849.253	1.701.031
Impact of deferred taxes	319.435	-299.403
Total items of comprehensive income for the year - net of tax	**31.380.690**	**321.822.353**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**205.292.262**	**652.991.035**
share attributable to		
- non-controlling interests	*1.911.016*	*2.115.229*
- equity holders of the parent company	*203.381.246*	*650.875.806*

The notes on pages 53 to 176 are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity as at 31 December 2021

At the end of the first quarter of 2021, Spuerkeess decided to distribute EUR 40 million from its 2020 income to the Luxembourg State. In line with European Central Bank recommendation ECB/2020/62 of 15 December 2020, this payment was made on 30 April 2021.

The profit distribution for financial year 2019, which was allocated in 2020 and whose payment had been suspended, was made to the Luxembourg State after the lifting of the European Central Bank's restrictions, on 4 October 2021.

For financial year 2022, Spuerkeess is proposing to distribute EUR 40 million from 2021 net profit to the Luxembourg State in 2022, in accordance with the European Central Bank's recommendations.

in euros	Share capital	Consolidated reserves	Other items of comprehensive income	Net income	Total equity – holders of the parent	Non-controlling interests	Total equity
At 1 January 2020	**173.525.467**	**3.572.183.228**	**462.101.585**	**206.340.539**	**4.414.150.819**	**2.780.514**	**4.416.931.333**
Appropriation of 2019 income	-	206.340.539	-	-206.340.539	-	-	-
2020 net income	-	-	-	172.000.556	172.000.556	1.911.016	173.911.572
Distribution for FY 2019	-	-40.000.000	-	-	-40.000.000	-	-40.000.000
Actuarial gains/losses relating to employee benefits	-	-	-22.496.808	-	-22.496.808	-	-22.496.808
Value adjustment on financial instruments measured at fair value through the revaluation reserve net of deferred taxes	-	-	68.923.857	-	68.923.857	-	68.923.857
Net measurement results of cash flow hedges	-	-	-1.388.049	-	-1.388.049	-	-1.388.049
Equity method adjustment	-	-3.617.467	-958.803	-	-4.576.270	-	-4.576.270
Adjustments related to equity-accounted values	-	31.209.544	-	-	31.209.544	-	31.209.544
2020 income from sales of variable-income securities	-	-	-12.699.508	-	-12.699.508	-	-12.699.508
Other	-	-63.922	-93.912	-	-157.834	-1.964.523	-2.122.357
At 31 December 2020	**173.525.467**	**3.766.051.922**	**493.388.362**	**172.000.556**	**4.604.966.307**	**2.727.007**	**4.607.693.314**

The notes on pages 53 to 176 are an integral part of these consolidated financial statements.

in euros	Share capital	Consolidated reserves	Other items of comprehensive income	Net income	Total equity – holders of the parent	Non-controlling interests	Total equity
At 1 January 2021	**173.525.467**	**3.766.051.922**	**493.388.362**	**172.000.556**	**4.604.966.307**	**2.727.007**	**4.607.693.314**
Appropriation of 2020 income	-	172.000.556	-	-172.000.556	-	-	-
Appropriation of 2020 income from sales of variable-income securities	-	-12.699.508	12.699.508	-	-	-	-
2021 net income	-	-	-	329.053.453	329.053.453	2.115.229	331.168.682
Distribution for FY 2020	-	-40.000.000	-	-	-40.000.000	-	-40.000.000
Actuarial gains/losses relating to employee benefits	-	-	1.293.757	-	1.293.757	-	1.293.757
Value adjustment on financial instruments measured at fair value through the revaluation reserve net of deferred taxes	-	-	280.109.892	-	280.109.892	-	280.109.892
Net measurement results of cash flow hedges	-	-	1.276.794	-	1.276.794	-	1.276.794
Equity method adjustment	-	-1.395.116	11.792.309	-	10.397.193	-	10.397.193
2021 income from sales of variable-income securities	-	-	27.349.601	-	27.349.601	-	27.349.601
Other	-	-4.712	-	-	-4.712	-1.886.459	-1.891.171
At 31 December 2021	**173.525.467**	**3.883.953.142**	**827.910.223**	**329.053.453**	**5.214.442.285**	**2.955.777**	**5.217.398.062**

The notes on pages 53 to 176 are an integral part of these consolidated financial statements.

Consolidated statement of cash flow as at 31 December 2021

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.

in euros	31/12/2020	31/12/2021
Cash and cash equivalents		
Cash and sight accounts with central banks	7.132.995.694	9.774.621.715
Loans and advances at amortised cost – Credit institutions	536.338.614	601.382.723
Loans and advances at amortised cost – Customers	1.758.797.703	1.887.565.410
Total	**9.428.132.011**	**12.263.569.848**

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.

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

- investing activities comprise the acquisition and disposal of long-term assets and all other investments not included in cash equivalents;

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

in euros	31/12/2020	31/12/2021
CASH POSITION AT 1 JANUARY	**8.285.173.861**	**9.428.132.011**
Income for the year	173.911.572	331.168.682
Non-cash adjustments relating to:		
Net allowances for impairment of credit risks	27.457.405	-24.285.798
Depreciation allowances for tangible and intangible assets	39.632.744	43.735.888
Provisions	20.183.686	-6.715.047
Unrealised gains/losses	6.865.811	-8.518.318
Share in the profit of equity-accounted associates	-45.813.491	-121.155.292
Other adjustments	-7.072.601	-25.835.635
Changes relating to assets and liabilities from operating activities:		
Financial instruments recognised at fair value	552.789.305	220.577.017
Loans and advances at amortised cost	-726.551.361	-506.269.746
Deposits at amortised cost	2.505.925.054	3.319.875.955
Issuance of debt securities	-830.957.073	-108.024.297
Other assets and liabilities	-17.952.310	-14.363.074
Total cash flow from operating activities	**1.698.418.741**	**3.100.190.335**
of which:		
Interest received	*808.025.016*	*724.730.117*
Interest paid	*-421.338.249*	*-334.759.951*
Income from variable-income securities	*15.881.134*	*23.095.100*
Tax on income from continuing operations	*-30.971.361*	*-57.892.450*
Acquisition/disposal of variable-income securities	28.962.663	20.951.039
Acquisition/disposal of investments in associates accounted for using the equity method	2.595.000	-6.818.861
Acquisition of fixed-income securities	-4.354.217.126	-3.040.415.782
Disposal/redemption of fixed-income securities	3.826.448.252	3.042.175.532
Acquisitions/disposals of intangible and tangible assets	-16.550.125	-29.784.149
Total cash flow from investment activities	**-512.761.336**	**-13.892.221**
Proceeds from subordinated liabilities	-11.320.285	-42.260.000
Expenses related to leases	-3.213.795	-1.490.973
Income distribution	-	-80.000.000
Total cash flow from financing activities	**-14.534.080**	**-123.750.973**
NET CHANGE IN CASH	**1.171.123.325**	**2.962.547.141**
Effect of exchange rates on cash and cash equivalents	-28.165.175	-127.109.304
CASH POSITION AT 31 DECEMBER	**9.428.132.011**	**12.263.569.848**

The presentation of the statement of cash flow from operating activities has been restated retroactively to align with the ESEF requirements.

Reconciliation of cash flows from financing activities

in euros	01/01/2020	Movements related to cash flow	Movements unrelated to cash flow	31/12/2020
Proceeds from subordinated liabilities	100.025.429	-11.320.285	2.314.004	91.019.148

in euros	01/01/2021	Movements related to cash flow	Movements unrelated to cash flow	31/12/2021
Proceeds from subordinated liabilities	91.019.148	-42.260.000	1.237.978	49.997.126

Movements unrelated to cash flow correspond to movements in accrued interest and accrued premiums/discounts.

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 December 2021

1 GENERAL INFORMATION

Banque et Caisse d'Epargne de l'Etat, Luxembourg (hereinafter "Spuerkeess" or the "Group's parent company"), established by the law of 21 February 1856 and governed by the law of 24 March 1989, as amended, 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.

Spuerkeess 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 Spuerkeess.

Spuerkeess'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, Spuerkeess's objective 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 2021 of 1.881 people (1.874 in 2020), 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 30 March 2022.

The official version of the consolidated annual financial statements as at 31 December 2021 is the version in the ESEF format, published in accordance with the requirements of Delegated Regulation 2019/815 on the European Single Electronic Reporting Format, available via the Officially Appointed Mechanism (OAM) tool.

2 BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

2.1 Compliance with general accounting principles

The Group's consolidated financial statements for the 2021 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 recognised at fair value through profit or loss, financial assets held for trading and derivatives. Variable-income securities, debt instruments included in the hold to collect and sell business model (HTCS, see section 3.2.4.1) and employee benefit provision 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 2021

The amendments to the following standards and interpretations have little or no impact on the Spuerkeess Group:

- The amendments to IFRS 16 "Leases" regarding Covid-19-related rent concessions, applicable since 1 April 2021,
- The amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 in connection with interest rate benchmark reform – Phase 2, applicable since 1 January 2021; see section 2.2 for the impact of IBOR reform,
- The amendments to IFRS 4 "Insurance contracts" in connection with IFRS 9 "Financial Instruments", applicable since 1 January 2021.

2.1.2 New or revised standards adopted by the European Union and not yet applicable as of 1 January 2021

The amendments to the following current and new standards are not expected to have a material impact on the Spuerkeess Group's consolidated annual financial statements:

- The amendments to IFRS 3 "Business Combinations", IAS 16 "Property, Plant and Equipment" and IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", as well as to IFRS standards 2018-2020 as part of the annual improvements applicable from 1 January 2022.

2.1.3 New or revised standards not yet adopted by the European Union and not yet applicable as of 1 January 2021

The amendments to the following current and new standards are not expected to have an impact on the Spuerkeess Group:

- The amendments to IAS 1 "Presentation of Financial Statements" regarding the classification of liabilities as current or non-current liabilities (applicable from 1 January 2023),
- Disclosure of accounting policies amendments to IAS 1 "Presentation of Financial Statements" and IFRS practice statement 2 (applicable from 1 January 2023),
- The amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" regarding the definition of accounting estimates (applicable from 1 January 2023),
- The amendments to IAS 12 "Income taxes" regarding deferred tax related to assets and liabilities arising from a single transaction (applicable from 1 January 2023).

The amendments to the following current and new standards will have an impact on the Group:

- IFRS 17 (standard) "Insurance Contracts" (application postponed until 1 January 2023 by the IASB).

2.2 IBOR reform

A benchmark is any index by reference to which the amount payable under a financial instrument, or the value of a financial instrument, is determined, or an index that is used to measure a portfolio's performance.

The introduction of European Regulation (EU) No. 2016/1011 of 8 June 2016 (the "Benchmark Regulation" or the "Regulation") changes the landscape for market participants, including credit institutions, which must develop a plan to transition from the benchmarks they use in their contracts to new indices. Applicable since 1 January 2018, the Benchmark Regulation provides for a transitional period through end-2021 during which the indices used in 2016 can still be published. Beyond that date, all benchmarks must comply with all the requirements of the Regulation and must be published by an administrator included in the register maintained by the European Securities and Markets Authority (ESMA).

The Group's parent company is affected by the provisions of the Benchmark Regulation due to its use of benchmarks, within the meaning of the Regulation, in financial instruments, loan agreements and accounts.

The Group's parent company adopted the first phase of IBOR reform on 1 January 2020.

IBOR – Phase 2

The amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16, published by the IASB in August 2020 and adopted by the European Commission in January 2021, make changes to financial assets and liabilities related to the entry into force of existing contractual terms, hedge accounting, and disclosures.

Adoption consists primarily of:

- a practical expedient to account for changes related solely to implementation of the benchmark reform and provided the new basis for determining contractual cash flows is economically equivalent to the previous basis. The changes will therefore be reflected in a new effective rate of return, in accordance with the applicable provisions of IFRS 9;
- measures that allow the hedging relationship to be maintained if the benchmark rate of the hedged item or the hedging item is changed;
- the option to designate as a hedged risk a risk that is not separately identifiable on the date of the change, but which the Bank believes will meet this requirement within 24 months;
- disclosures in the notes to the financial statements in order to identify:
  - the nature of the risks arising from benchmark rate reform to which the Bank is exposed;
  - the progress in completing the transition to alternative benchmark rates and how it is managing that transition.

The remaining maturity of the instruments included is beyond the date of 31 December 2021, in accordance with the following conventions:

- Financial assets and liabilities excluding derivatives are included based on their outstanding nominal amount;
- Derivatives are presented based on their notional amount.

in EUR thousands as at 31 December 2021	Financial assets	Financial liabilities	Derivatives (notional amounts)
EONIA	-	-	-
EURIBOR	8.445.642	62.000	14.974.834
LIBOR-USD	64.379	-	25.624
LIBOR-JPY	-	-	1.533
LIBOR-other	4.168	-	-
Total	**8.514.190**	**62.000**	**15.001.992**

The Group's parent company has established a working group made up of representatives from the various departments concerned to address the issue. The different contracts affected by IBOR reform have been inventoried and contracts without a fallback clause, i.e. with no alternative benchmark to the EURIBOR, EONIA or LIBOR rates, have been identified.

For the Phase 2 transposition, the working group worked with the various departments concerned to:

- draft a common fallback clause, in accordance with the requirements of Regulation 2016/1010 of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts;
- adhere to the ISDA IBOR Protocol, which is an update of the ISDA IBOR Supplement;
- adapt contracts that do not have a fallback clause;
- adapt the contractual documentation to meet the requirements of the regulatory framework;
- prepare to communicate with the customers concerned;
- prepare to carry out IT work on the various systems affected;
- address any customer feedback.

2.3 Consolidation

2.3.1 Scope of consolidation

The consolidated financial statements comprise the parent company, subsidiaries and associates 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 acquiror 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.

Subsidiaries	Business	% of voting rights held	
		31/12/2020	31/12/2021
Lux-Fund Advisory S.A.	Investment advice	89,67	89,55
BCEE Asset Management S.A.	UCI management company	90,00	90,00
Bourbon Immobilière S.A.	Real estate	100,00	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	
		31/12/2020	31/12/2021
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	25,35
Europay Luxembourg S.C.	Financial services	30,10	30,10
European Fund Administration S.A.	Financial services	31,67	31,51
LuxHub S.A.	Financial services	32,50	32,50
Visalux S.C.	Financial services	34,66	35,36
Lalux Group S.A.	Insurance	40,00	40,00

The scope of investments in associates was unchanged relative to 31 December 2020. The shareholding rate for European Fund Administration S.A., Visalux S.A., and Société de la Bourse de Luxembourg S.A. changed over the course of financial year 2021.

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 classified 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	31/12/2020	31/12/2021
CHF	1,0815	1,0337
GBP	0,8998	0,8397
JPY	126,6300	130,4400
SEK	10,0212	10,2568
USD	1,2287	1,1331

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 (solely payments of principal and interest) 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 assets and their expected useful life (Section 3.6);
- actuarial assumptions used in the calculation of the defined-benefit obligation (Section 3.9.3).

3 INFORMATION ON THE GROUP'S MAIN ACCOUNTING POLICIES

3.1 Cash and sight accounts with central banks

Cash consists essentially of "Cash", the various banks' nostro accounts and cash with 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

Since 1 January 2018, the Group has prepared its consolidated financial statements in accordance with IFRS 9 "Financial Instruments".

The measurement categories established by IFRS 9 are as follows: financial instruments held for trading, hedging derivatives, financial instruments mandatorily recognised at fair value through profit or loss, financial instruments recognised at amortised cost and financial instruments recognised 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 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 "EMTN – Euro Medium Term Notes" 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.

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

The Group measures variable-income securities at fair value 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.

Changes in own funds of equity-accounted associates are recognised on the assets side of the balance sheet under "Investments in associates accounted for using the equity method", as well as in shareholders' equity under "Equity method adjustment".

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 long-term assets, regardless of the product:

- The fixed-income securities acquired are held long term. 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 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 only 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 recognised at amortised cost and are included in the balance sheet item "fixed-income securities recognised at amortised cost".

  • **HTCS ("Hold to collect and sell")** portfolio: this involves holding long-term securities, but with the possibility of selling them based on opportunities in the financial markets.

  Unlike the HTC portfolio, which is limited to securities held to maturity, 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.

  Bond positions in the HTCS portfolio are classified in the portfolio of financial assets recognised at fair value through the revaluation reserve.

- **FVTPL ("Fair value through profit or loss")** portfolio 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 recognised 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 recognised at fair value through profit or loss and presented globally in the balance sheet under the heading "financial assets mandatorily recognised 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 bank margin (NBM). The NBM 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 with the aim of anticipating the achievement of absolute thresholds:

- a number of 50 transactions;
- a cumulative nominal value of 2%;
- an NBM 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 classification of a security as SPPI-compliant or non-SPPI-compliant is reflected in its 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 repayment 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 an 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 Non-current assets and disposal groups classified as held for sale

In accordance with IFRS 5, the Bank classifies its financial and non-financial assets as assets held for sale in the following cases:

- The asset must be available for immediate sale in its present condition;
- The sale must be highly probable;
- The carrying amount is recovered principally through a sale transaction rather than through continuing use.

Bank management must be committed to a plan to sell the asset, and an active programme to locate a buyer and complete the plan must be initiated. The sale generally takes place within 12 months of its initiation.

Assets in this category are measured at the lower of amortised cost or fair value less the cost of the sale.

Non-financial assets classified in this category are not subject to depreciation or amortisation. Financial assets continue to be measured in accordance with IFRS 9.

3.2.7 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 creditors and liabilities arising from leases.

3.2.8 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". Interest is recognised at the effective interest rate in "Interest income".

Dividends are recorded under "Income from securities", while interest is recorded 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.

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.

3.2.9 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 is made after the transaction date are recognised on the balance sheet on the delivery or settlement date, respectively.

All financial instruments are recorded at fair value on initial recognition, plus any directly attributable costs when the financial instruments are not recognised at fair value through profit or loss. This initial fair value generally corresponds to the transaction price.

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

Financial derivatives are recognised on the balance sheet at their fair value 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 classified as held for trading or has not been designated as measured at fair value through profit or loss. 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 through profit or loss.

Gains or losses on the sale of financial assets that are not subject to revaluation through profit or loss 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 where applicable, 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 consideration 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 valuation for the financial instruments measured at fair value, the Group uses the following methods and models:

- derivative financial instruments held for trading or hedging: the Bank 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 Spuerkeess-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 securities or securities listed on an inactive market, Spuerkeess determines 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 impact 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;
  - EMTNs issued by the Group's parent company designated at fair value through profit or loss: 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 Spuerkeess relating to market variations (e.g. an estimation of the payment plan of an MBS).

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

- Level 1 fair value: 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.

- Level 2 fair value: 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 provided by specialised financial data providers.
- Level 3 fair value: 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. 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 Spuerkeess, participate in the transaction;
  - for the three six-month periods 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;
  - when the last transaction is more than two years old, a valuation based on the market ratios of this peer group is preferred. It 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 market-multiples valuation, 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 parent company.

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 CDS prices;
- interbank interest rates or swap rates;
- foreign exchange rates;
- stock indices;
- counterparty credit spreads.

3.3.4 Impairment of financial assets

In accordance with the second phase of IFRS 9, Spuerkeess 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 is equal to a 1-year expected credit loss

- "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;

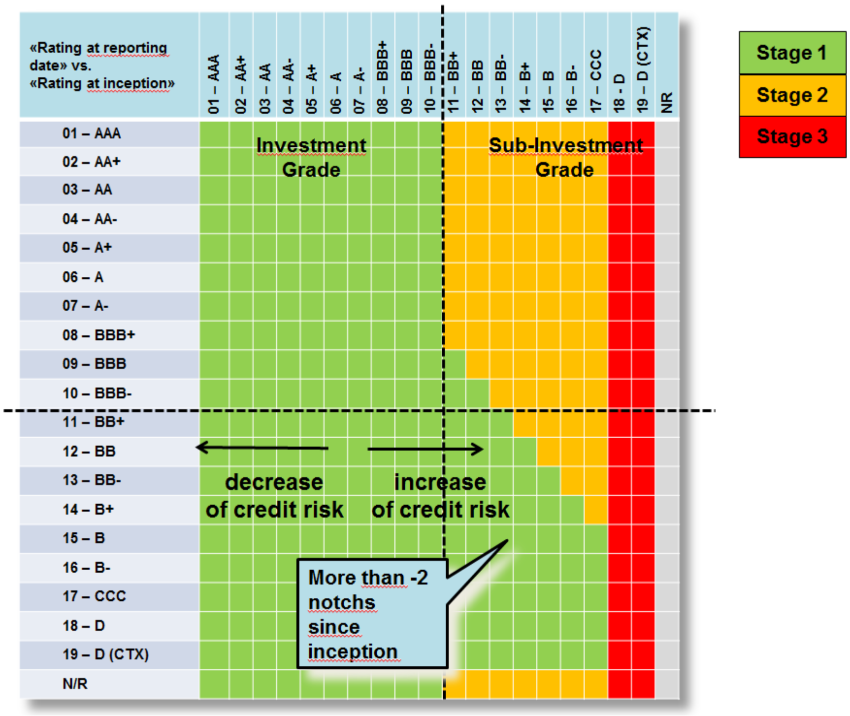
- are "non-performing" but not in default under Article 178 of the CRR;
- have been restructured according to the definition introduced by the European Banking Authority (EBA) and adopted by the European Union in Regulation (EU) 2015/227.

⇨ Value adjustment is equal to a lifetime expected credit loss

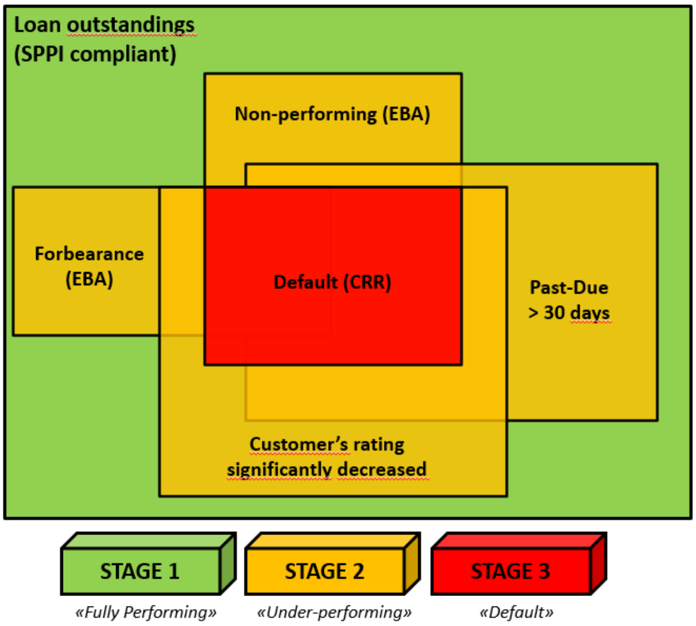
• "stage 3" includes exposures in default according to Article 178 of the CRR.

⇨ Value adjustment is equal to a 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 Covid-19 health crisis has not led to any changes in the migration matrix and Spuerkeess does not purchase securities with a sub-investment grade rating:



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



As Spuerkeess applies the definition of default at the debtor level, all the exposures of a customer in default are found in "stage 3". This "contagion" is not automatically applied for "stage 2". The same customer can therefore have commitments classified in "stage 1" and "stage 2".

The table below summarises the triggers for various events:

Notions	Explanations	IFRS 9 stage
1. "Default"	· No payment arrears, but "unlikeliness to pay" (ULP), in the sense of a serious doubt about the future ability to meet the commitments (e.g. bankruptcy). · The absolute threshold (a) and the relative threshold (b) have been exceeded for 90 consecutive days: a) absolute threshold: arrears > EUR 100 (retail) or EUR 500 (wholesale); b) relative threshold: amount of arrears relative to the total amount of exposures to the debtor on the Bank's balance sheet > 1% (retail and wholesale).	STAGE 3
2. "Non-Performing"	· Late > ½ monthly instalment for > 90 days, or · Overdraft > EUR 100 for 90 days.	STAGE 2
3. "Forbearance/renegotiated due to significant increase in 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) <u>and</u> customer in financial difficulty.	STAGE 2
4. "Past-Due"	· Late payment > 30 days with certain materiality thresholds (EBA notion).	STAGE 2
5. Internal rating	· Internal rating downgraded by ≥ 3 notches "since initial recognition" and "sub-investment grade" rating as at the reporting date.	STAGE 2
6. Stage override	· Potential stage override to account for information not included in the above indicators	STAGE 2

Probationary periods:

Migration	Migration trigger	Probationary period	Conditions
Stage 2 to Stage 1	Forbearance	2 years	- significant amount repaid during the probationary period - investment grade rating - performing
	Wholesale rating	1 year	the variables considered for the Wholesale rating are based on the financial statements published annually: potential impact on the rating for 12 months
	Retail internal rating	6 months	the variables considered for the Retail rating are based on historical behaviour in the last 6 months: potential impact on the rating for 6 months
Stage 3 to Stage 2	Non-performing and forbearance	1 year	Parallel non-performing and forbearance status triggers the default. The customer exits non-performing and default if the forbearance start date ≥ 1 year. There is therefore a one-year probationary period for non-performing/default status.
	Automatic closure of the default (repayment of outstanding debts), but other ongoing stage 2 event	min. 3 months	Payment of outstanding debts triggers a 3-month probationary period (or 12 months for forbearance status). After the probationary period, the
	Manual closure of an unlikeliness to pay default, but other ongoing stage 2 event	min. 3 months	When a default is closed manually, a 3-month probationary period (or 12 months for forbearance status) is also applied.
Stage 3 to Stage 1	Automatic closure of the default (repayment of outstanding debts)	min. 3 months	Payment of outstanding debts triggers a 3-month probationary period (no forbearance). After the probationary period, the customer moves from Stage 3 to Stage 1 (no SICR).
	Manual closure of an unlikeliness to pay default	min. 3 months	When a default is closed manually, a 3-month probationary period (no forbearance) is also applied.

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	$ECL = PD_{M,1} \cdot LGD_1 \cdot Exposures(t_0)$	- $PD_{M,1} = 1-(1-PD_1)^M$ 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, - $Exposure(t_0)$ = 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	$ECL = 100\% \cdot LGD_1 \cdot Exposures(t_0)$	- LGD_1 = Loss given default during the next year, - $Exposure(t_0)$ = Exposure at the beginning of the period

The basic principles applied by Spuerkeess 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, Spuerkeess 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 macroeconomic scenario.

To assess the lifetime value adjustment of a product, a 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 LGDs of exposures secured by property factor in the future change in the value of the properties defined in the baseline, adverse and optimistic scenarios. A haircut is then applied to the projected value of the properties to account for the expenses associated with debt recovery (e.g. forced sale).

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

Spuerkeess uses three scenarios, weighted as follows:

	Scenario weightings		
	Baseline	Adverse	Optimistic
2020	65%	25%	10%
2021	50%	40%	10%

The weighting of the scenarios accounts for both the uncertain macroeconomic environment and the uncertainty as to how the health situation will unfold worldwide.

The scenarios are based on projections by national or international authorities, namely STATEC and the IMF. A decision is made about the source based on the availability of the information and its relevance for Spuerkeess. If necessary, these projections are supplemented with an internal scenario (see adverse scenario below) or adjusted to account for post-publication developments (see baseline scenario below).

The baseline scenario was defined using the IMF's projections published in April 2021[5]. However, the 2022 variables for the advanced economies scope were updated to account for the projections published by the IMF in July 2021 (see World Economic Outlook of 07/2021, with GDP at 4,4% for 2022). The inflation figures have been adjusted upwards by 0,2 point for 2023 and 2024 to reflect the higher than market consensus inflation expectations.

For the adverse scenario, an expert-based stagflation-type scenario was constructed as the IMF did not publish an adverse scenario: the 2020 crisis is replicated for 2022 (GDP of -4,7% for advanced economies) and is based on the change in the macroeconomic variables published by the IMF in April 2021, with higher inflation than in the baseline scenario (persistent supply chain disruptions). The crisis is projected to end in 2024. A 15% decline in real estate prices was also simulated in this scenario. This scenario projects a tightening of financing conditions which generates higher borrowing costs and reduces access to financing. This reverses the supply/demand ratio and causes a sharp decline in real estate prices.

The results are reviewed and validated by the appropriate bodies at Spuerkeess.

- ECLs and sensitivity scenarios at 31/12/2020

Type of scenario	Weighting	Macroeconomic variables	2021	2022	2023	Unweighted ECLs (in EURm)	Weighted ECLs (in EURm)
Baseline	65%	Luxembourg GDP	5,90%	3,80%	3,10%	178	178
		Luxembourg CPI	1,40%	1,80%	1,90%		
		Advanced economies GDP	3,90%	2,90%	2,20%		
		Advanced economies CPI	1,60%	1,60%	1,70%		
Adverse	25%	Luxembourg GDP	-0,40%	3,00%	3,00%	180	
		Luxembourg CPI	-0,90%	1,42%	1,84%		
		Advanced economies GDP	1,00%	3,90%	2,70%		
		Advanced economies CPI	0,41%	2,15%	2,09%		
Optimistic	10%	Luxembourg GDP	8,70%	5,00%	4,00%	177	
		Luxembourg CPI	2,06%	2,37%	2,45%		
		Advanced economies GDP	4,40%	3,65%	3,30%		
		Advanced economies CPI	1,81%	2,01%	2,55%		

[5] The updated baseline scenarios published in October 2021 and January 2022 by the IMF did not change significantly compared with the scenarios used in April 2021 and July 2021. These scenarios have therefore not been taken into account.

- ECLs and sensitivity scenarios at 31/12/2021

Type of scenario	Weighting	Macroeconomic variables	2022	2023	2024	Unweighted ECLs (in EURm)	Weighted ECLs (in EURm)
Baseline	50%	Luxembourg GDP	3,60%	3,00%	2,70%	108	140
		Luxembourg CPI	1,80%	1,90%	1,90%		
		Advanced economies GDP	4,40%	1,80%	1,60%		
		Advanced economies CPI	2,10%	1,80%	1,90%		
Adverse	40%	Luxembourg GDP	-1,30%	0,50%	3,60%	189	
		Luxembourg CPI	3,30%	2,40%	2,00%		
		Advanced economies GDP	-4,70%	1,00%	4,40%		
		Advanced economies CPI	3,60%	3,00%	2,50%		
Optimistic	10%	Luxembourg GDP	4,30%	3,00%	3,00%	101	
		Luxembourg CPI	2,15%	1,90%	2,11%		
		Advanced economies GDP	5,46%	2,00%	1,48%		
		Advanced economies CPI	2,61%	2,00%	1,76%		

In response to the Covid-19 pandemic crisis and its economic impacts (inflationary trends and supply chain disruptions), Spuerkeess introduced the following provisions as management overlays in its IFRS 9 models:

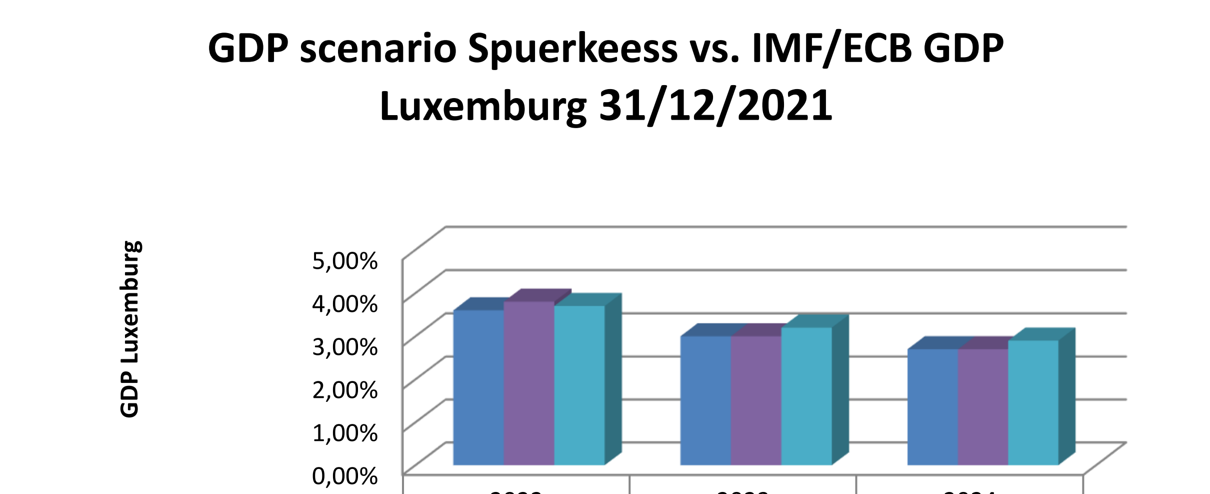
- The Bank used a management overlay via the weightings of the three scenarios. Under the existing procedure, the weighting of the three scenarios should have been calculated based on a quantitative and qualitative analysis[6]. However, the Bank overrode this approach to account for the current uncertainties. The quantitative/qualitative approach was therefore replaced by a more conservative expert-based judgement approach. The weightings used are 50% for the baseline scenario (instead of 65%), 40% for the adverse scenario (instead of 20%) and 10% for the optimistic scenario (instead of 15%);

- The value adjustment determination has systematically taken into account an additional three-notch downgrade of the behavioural rating of retail customers who work in one of the high-risk sectors that has been severely affected by the health crisis.

These two measures increased provisions at 31 December 2021 by EUR 18,2 million.

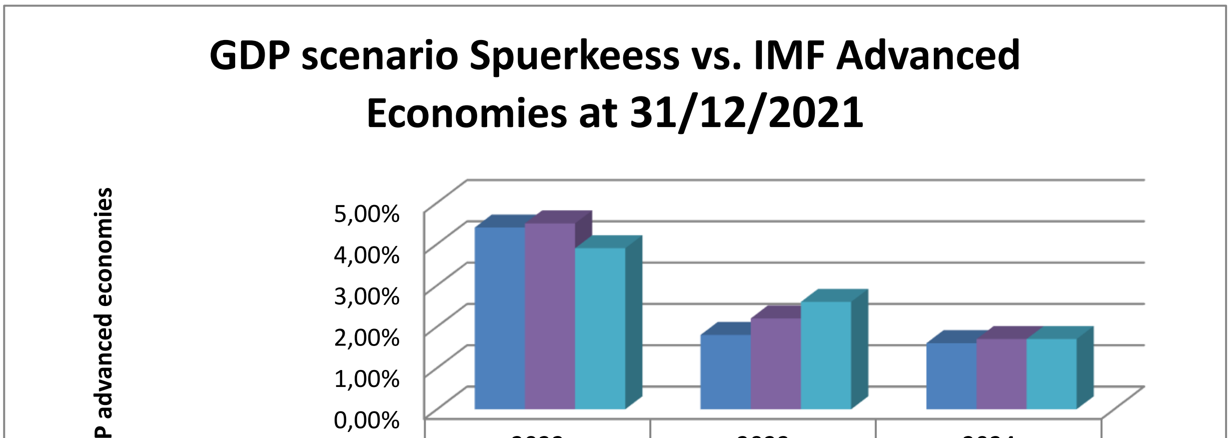
[6] Qualitative approach based on an analytical report by a leading European asset manager

The tables below compare the three scenarios used relative to the IMF's baseline scenario and to the ECB[7].



	2022	2023	2024
Baseline GDP Spuerkeess	3,60%	3,00%	2,70%
Baseline GDP IMF 2021/10	3,80%	3,00%	2,70%
Baseline GDP ECB 2021/12	3,70%	3,20%	2,90%

Comparison of scenarios used at 31/12/2021 (Luxembourg)



	2022	2023	2024
Baseline GDP Spuerkeess	4,40%	1,80%	1,60%
Baseline GDP IMF 2021/10	4,50%	2,20%	1,70%
Baseline GDP IMF 2022/01	3,90%	2,60%	1,70%

Comparison of scenarios used at 31/12/2021 (Advanced Economies)

[7] The ECB's publication is only used as a benchmark for the Luxembourg baseline scenario used by Spuerkeess. The ECB's publication is not used as a benchmark for advanced economies, as the ECB does not publish this scope.

3.3.4.1 Write-off of receivables measured at amortised cost

Only stage 3 assets can be the subject of a write-off of receivables.

The decision to write off a receivable is made by Spuerkeess'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.

3.3.5 Moratoria and public guarantees

Pursuant to EBA guidelines EBA/GL/2020/02 and EBA/GL/2020/07, the Group's parent company publishes information on the moratoria and public guarantees for loans related to the Covid-19 pandemic crisis:

- Information on loans and advances at amortised cost, subject to moratoria:

as at 31/12/2021	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
		Performing			Non-performing				Performing			Non-performing			
			Of which: exposures with forbearance measures	Of which: Instruments whith significant increase in credit risk since initial recognition but not credit-impaired (stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days			Of which: exposures with forbearance measures	Of which: Instruments whith significant increase in credit risk since initial recognition but not credit-impaired (stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
Loans and advances subject to moratorium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
of which: Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
of which: Collateralised by residential immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
of which: Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
of which: Small and Medium-sized Enterprises	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
of which: Collateralised by commercial immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

as at 31/12/2020	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
		Performing			Non-performing				Performing			Non-performing			
			Of which: exposures with forbearance measures	Of which: Instruments whith significant increase in credit risk since initial recognition but not credit-impaired (stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days			Of which: exposures with forbearance measures	Of which: Instruments whith significant increase in credit risk since initial recognition but not credit-impaired (stage 2)		Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
Loans and advances subject to moratorium	16.341.391	15.257.015	3.581.995	4.790.198	1.084.376	-	1.084.376	-971.500	-323.477	-230.082	-317.277	-648.023	-	-648.023	-
of which: Households	8.985.370	8.985.370	674.174	674.174	-	-	-	-7.009	-7.009	-993	-993	-	-	-	-
of which: Collateralised by residential immovable property	8.651.101	8.651.101	468.745	468.745	-	-	-	-6.024	-6.024	-22	-22	-	-	-	-
of which: Non-financial corporations	7.356.021	6.271.645	2.907.821	4.116.024	1.084.376	-	1.084.376	-964.491	-316.469	-229.088	-316.284	-648.023	-	-648.023	-
of which: Small and Medium-sized Enterprises	2.648.922	1.564.546	-	556.230	1.084.376	-	1.084.376	-648.023	-	-	-	-648.023	-	-648.023	-
of which: Collateralised by commercial immovable property	5.619.672	5.619.672	2.907.821	3.464.051	-	-	-	-229.273	-229.273	-229.088	-229.088	-	-	-	-

- Breakdown of loans and advances at amortised cost subject to legislative and non-legislative moratoria by residual maturity:

As at 31 December 2021	Number of customers	Carrying amount							
			of which legislative moratoria	of which expired moratoria *	Residual maturity of moratoria: <= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances at amortised cost for which moratoria have been proposed	864	588.954.133							
Loans and advances at amortised cost with moratoria	849	578.702.864	-	578.702.864	-	-	-	-	-
of which retail		122.745.150	-	122.745.150	-	-	-	-	-
of which with a mortgage		*116.537.710*	-	*116.537.710*	-	-	-	-	-
of which corporate		455.957.714	-	455.957.714	-	-	-	-	-
of which SMEs		*369.201.308*	-	*369.201.308*	-	-	-	-	-
of which with a commercial mortgage		*345.574.715*	-	*345.574.715*	-	-	-	-	-

As at 31 December 2020	Number of customers	Carrying amount							
			of which legislative moratoria	of which expired moratoria *	Residual maturity of moratoria: <= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances at amortised cost for which moratoria have been proposed	977	714.336.466							
Loans and advances at amortised cost with moratoria	960	702.946.462	-	686.605.071	15.665.184	676.107	-	-	-
of which retail		138.602.092	-	129.616.722	8.865.494	119.876	-	-	-
of which with a mortgage		*129.173.471*	-	*120.522.370*	*8.651.101*	-	-	-	-
of which corporate		564.344.370	-	556.988.350	6.799.790	556.230	-	-	-
of which SMEs		*426.095.304*	-	*423.446.382*	*2.092.691*	*556.230*	-	-	-
of which with a commercial mortgage		*406.225.435*	-	*400.605.763*	*5.063.442*	*556.230*	-	-	-

** the term expired refers only to the moratoria, loans under this caption being normaly reimbursed*

- Information on newly originated loans and advances at amortised cost covered by public guarantees in response to the Covid-19 pandemic:

As at 31 December 2021	Carrying amount		Maximum amount of the guarantees that can be considered	Carrying amount
		of which restructurings	Public guarantees received	Inflows to non-performing exposures
Newly originated loans and advances at amortised cost subject to the public guarantee principle	32.732.987	930.986	27.823.039	28.702
of which retail	516.558			-
of which with a mortgage	-			-
of which corporate	32.216.429	888.880	27.383.965	28.702
of which SMEs	*32.131.590*			*28.702*
of which with a commercial mortgage	*463.239*			-

As at 31 December 2020	Carrying amount		Maximum amount of the guarantees that can be considered	Carrying amount
		of which restructurings	Public guarantees received	Inflows to non-performing exposures
Newly originated loans and advances at amortised cost subject to the public guarantee principle	28.644.145	1.002.154	24.347.523	3.836.852
of which retail	165.773			-
of which with a mortgage	-			-
of which corporate	28.478.371	1.002.154	24.206.616	3.836.852
of which SMEs	*27.790.460*			*3.836.852*
of which with a commercial mortgage	*503.356*			-

The public guarantee covers 85% of the amount of loans originated under certain defined conditions. The term of the loans is limited to a maximum of six years.

The Group's parent company applies the private (non-legislative) moratorium for a period of six months pursuant to the memorandum signed on 16 April 2020 by several financial centre banks in accordance with the criteria established in the European Banking Authority's Guidelines of 2 April 2020 on legislative and non-legislative moratoria on loan repayments applied in the light of the Covid-19 crisis (EBA/GL/2020/02). Financial centre banks have decided not to extend the memorandum's validity period. Accordingly, moratoria granted to business customers as from 1 October 2020 no longer fall under this programme.

3.3.6 Sector-based analysis in the context of the Covid-19 pandemic

The Covid-19 pandemic that has raged since the beginning of 2020 and its impacts on Luxembourg's economy and on business customers prompted Spuerkeess to categorise its commitments into different sectors based on the international GICS (Global Industry Classification Standard) system. This classification starts with 11 key sectors which are then subdivided into three levels (industry groups, industries and sub-industries). The potential impact of the crisis is categorised as high, medium or low at the sub-industry level. This categorisation was regularly reviewed in 2020 and 2021 so that the impact of the Covid-19 pandemic on certain sectors could be confirmed or re-estimated.

Spuerkeess has thus reviewed the internal rating of various business exposures, giving priority to sectors categorised as high impact. From this sector analysis, business customer reviews were prioritised on the basis of the overall impact on the sector. Customer reviews in high-impact sectors were carried out at a faster pace. Similarly, the projected sector impact was also reflected in the rating assigned to the customers in question.

The table below provides an analysis of the internal ratings of customers in the high-impact sector at 31 December 2021 and 2020 compared with their pre-Covid-19 baseline:

Period	New customers	Downgraded	Rating confirmed	Upgraded
Dec-20	14,40%	20,80%	37,50%	22,60%
Dec-21	9,20%	17,60%	49,20%	19,30%

Compared with the pre-Covid-19 baseline, at 31 December 2021 the ratings of 17,6% of customers active in the most affected sectors were downgraded, the ratings of 49,2% were confirmed, and the ratings of 19,3% were upgraded. For 9,2% of new customers, the Covid-19 impact was considered when assigning the initial rating and in any reviews conducted during the year. Compared with the pre-Covid-19 baseline, the ratings at 31 December 2020 were downgraded 20,8% of the time, confirmed 37,5% of the time and upgraded 22,6% of the time.

Sectors classified by Spuerkeess as high impact mainly include companies active in the following areas:

- Real Estate Operating Companies;
- Hotels, Resorts & Cruise Lines;
- Restaurants;
- Airport Services;
- Airlines.

Based on the last review, the automotive retail sales, integrated oil & gas and automobile manufacturers sectors are no longer included on this list.

At 31 December 2021, the combined exposures of high-impact customers represented EUR 2.182 million in outstandings and the related expected losses recorded stood at EUR 18 million. The breakdown of impairments by IFRS stage is as follows:

- 32,9% of impairments come from stage 1;

- 30,3% of impairments come from stage 2;
- 36,8% of impairments come from stage 3.

Spuerkeess also pays close attention to the commitments of customers indirectly affected by the high-impact sectors.

3.4 Repurchase and reverse repurchase agreements – Lending and borrowing of securities

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 a 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 Interbank market

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 other items of comprehensive income; this risk is deemed immaterial for the Group's parent company.

3.6 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. They also include right-of-use assets whose underlyings are tangible assets.

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 expenses".

Recognition under this heading of right-of-use assets under a lease is explained in section 3.8.1.

3.7 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.

3.8 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.

3.8.1 A Group entity is a lessee

IFRS 16 "Leases" replaced IAS 17 of the same name on 1 January 2019.

The Group has entered into leases mainly for buildings, car parks and S-BANK automated teller machines.

These leases led to the:

- recognition of a "right-of-use asset" on the assets side. The cost of the asset includes the initial amount of the lease liability as well as, where applicable, rent payments already made, initial direct costs and dismantling costs. This right of use is recognised under the asset item where the corresponding underlying assets would have been presented, i.e., the "tangible assets" item;
- recognition of a "lease liability" on the liabilities side: the lease liability represents the present value of the lease payments that have not yet been made. This lease liability is recognised on the liabilities side under "other liabilities". The Group has opted to recognise the undiscounted value of the lease payments given that the impact of this discounting would be immaterial. As a result, no interest expense is recognised on liabilities arising from leases;
- recognition in the income statement of "lease payments" and any "penalties" to be paid for early termination of a lease; penalties are recognised as expenses for the year in which the lease is terminated.

3.8.2 A Group entity is a lessor

When a Group entity is the lessor, a distinction must be made between finance leases and operating leases.

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.

When a Group entity 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.

When a Group entity leases an asset under an operating lease, the underlying asset is recognised on the balance sheet according to its nature. The Group's operating leases are for buildings and are recognised as investment property.

3.9 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.

3.9.1 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.

3.9.2 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 a maximum of 1.800 hours,
- use the accumulated hours as leave or, only upon definitive termination of the employment relationship, as compensation.

3.9.3 Post-employment benefits

The Group's parent company'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 based on their respective status and entry into service, pursuant to the Organic Law of 24 March 1989.

The amount of the benefit covered by the parent company 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 classified 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 Spuerkeess's other staff members.

Because of their mandate as a director of Spuerkeess, members of the parent company'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 parent company's annual pension expenses:
- 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 and fair value 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.

3.9.4 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 thus the probability of an extraordinary contribution request, and to match 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, but not limited to, units in investment or professional specialised investment funds, alternative investment funds, venture capital firms and unlisted Luxembourg public limited companies (SOPARFIs (financial holding companies) or others), as well as land and real estate.

The "CLP-BCEE" sub-fund invests a minimum of 50% of its gross assets in bonds, debt securities and money market financial instruments. "CLP-BCEE" may invest up to 50% of its assets in equities, equivalent securities and other instruments, but may not exceed the limit of 15% of gross assets for other instruments and units and shares of UCIs that do not have daily liquidity, that use leverage strategies or whose underlying assets are bonds or high-yield debt. There is an additional special restriction on high-yield bond debt UCIs, whose weight is limited to 7,5% of the sub-fund's gross assets.

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 instruments have a minimum rating of BBB- (Standard & Poor's) or Baa3 (Moody's). This rule is not binding so long as the official rating of a bond or money market instrument is downgraded from investment grade to high yield in the six months prior to its maturity. Any position in high-yield debt with a residual maturity of less than six months is also added to the high-yield bond debt UCI positions. Similarly, issuers of any bond or any money market instrument must be from an EU or OECD member country.

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

The CLP-BCEE sub-fund's investment strategy takes environmental, climate, social and governance factors into account, in line with Spuerkeess's general policy.

3.10 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.

3.11 "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 replaced 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 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 first target level of funding of the "Fonds de Garantie des Dépôts Luxembourg" (FGDL) was set at 0,8% of the covered deposits (as defined in Article 163(8) of the Law) of member institutions. In principle, this target was reached at the end of 2018 thanks to the annual contributions made in 2016 to 2018.

Between 2019 and 2026, Luxembourg credit institutions will continue to contribute annually to provide an additional cushion of 0,8% of covered deposits as defined in Article 163(8) of the Law.

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.

Contributions to the FGDL and the FRL are made through the income statement in a dedicated line within general expenses.

3.12 <u>Deferred taxes</u>

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 "Other items of comprehensive income".

4 NOTES TO THE BALANCE SHEET[8]

(in euros)

4.1 Cash and sight accounts with central banks

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

Headings*	31/12/2020	31/12/2021
Cash	82.782.418	69.498.015
Deposits with central banks	5.389.950.828	8.442.603.071
Other deposits at sight	1.655.402.409	1.261.631.168
Total	**7.128.135.655**	**9.773.732.255**
of which impairment of financial assets	*-3.218.289*	*-1.161.034*

* term of less than one year

4.2 Loans and advances at amortised cost – Credit institutions

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Interbank loans	1.139.413.151	92.176.695	1.231.589.845	788.746.206	198.934.306	987.680.512
Reverse repurchase/Repurchase agreements	482.781.865	94.679.600	577.461.465	292.459.557	26.637.058	319.096.615
Finance leases	27.055	125.709	152.764	25.791	156.664	182.455
Other	23.991.817	-	23.991.817	39.672.170	-	39.672.170
Total	**1.646.213.888**	**186.982.004**	**1.833.195.892**	**1.120.903.725**	**225.728.028**	**1.346.631.752**
of which impairment of financial assets	*-1.331.851*	*-275.038*	*-1.606.888*	*-295,.480*	*-245.746*	*-541.226*
Undrawn confirmed credits			289.176.718			238.325.841

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. In 2021, the Group's parent company reused securities from reverse repurchase transactions.

[8] 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.

Changes in impairments:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2020	**997.912**	**10**	**-**	**997.922**
Changes	**608.973**	**-7**	**-**	**608.966**
Increase due to acquisition and origination	1.958.201	-	-	1.958.201
Decrease due to repayment	-56.931	-	-	-56.931
Change related to credit risk	-1.292.573	-7	-	-1.292.580
Other changes		-	-	-
Depreciation	-	-	-	-
Exchange gain or loss	276	-	-	276
Position as at 31 December 2020	**1.606.885**	**3**	**-**	**1.606.888**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-

Outstanding amounts covered by provisions at 31 December 2020	Stage 1	Stage 2	Stage 3	Total
Outstanding	1.834.802.696	84	-	1.834.802.780

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2021	**1.606.885**	**3**	**-**	**1.606.888**
Changes	**-1.065.663**	**2**	**-**	**-1.065.661**
Increase due to acquisition and origination	1.534.811	-	-	1.534.811
Decrease due to repayment	-50.717	-	-	-50.717
Change related to credit risk	-2.550.292	2	-	-2.550.290
Other changes		-	-	-
Depreciation	-	-	-	-
Exchange gain or loss	535	-	-	535
Position as at 31 December 2021	**541.222**	**5**	**-**	**541.227**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-

Outstanding amounts covered by provisions at 31 December 2021	Stage 1	Stage 2	Stage 3	Total
Outstanding	1.347.172.383	595	-	1.347.172.979

The Group does not include in this category of loans and advances outstanding loans that are defined as restructured loans according to the EBA.

4.3 Loans and advances at amortised cost – Customers

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Retail customers	627.460.463	16.077.762.676	16.705.223.139	802.901.629	17.428.558.936	18.231.460.566
Corporate customers	1.726.251.040	4.041.351.542	5.767.602.582	1.717.289.661	4.073.855.472	5.791.145.133
Public sector	30.551.517	1.595.560.326	1.626.111.843	57.340.396	1.166.747.142	1.224.087.539
Total	**2.384.263.020**	**21.714.674.544**	**24.098.937.563**	**2.577.531.687**	**22.669.161.550**	**25.246.693.237**
of which impairment of financial assets	*-37.590.638*	*-85.974.463*	*-123.565.101*	*-34.246.169*	*-78.376.895*	*-112.623.064*
Undrawn confirmed credits			6.184.000.961			6.306.627.249

Of which finance leases:

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Finance leases	11.830.802	147.753.323	159.584.125	11.185.815	143.544.017	154.729.832
Total	**11.830.802**	**147.753.323**	**159.584.125**	**11.185.815**	**143.544.017**	**154.729.832**

Impairment of loans and advances – Customers

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2020	**18.474.246**	**25.940.836**	**68.076.739**	**112.491.821**
of which:				
Retail customers	*2.844.350*	*16.194.097*	*12.167.808*	*31.206.255*
Corporate customers	*15.574.586*	*9.746.685*	*55.908.931*	*81.230.201*
Public sector	*55.310*	*54*	*-*	*55.365*
Changes	**20.357.208**	**8.716.605**	**-18.000.533**	**11.073.280**
Increase due to acquisition and origination	8.485.010	1.479.452	624.786	10.589.247
Decrease due to repayment	-324.001	-329.136	-436.113	-1.089.250
Change related to credit risk	12.176.809	6.942.769	-15.278.629	3.840.949
Other changes	32.143	623.523	-501.136	154.530
Depreciation	-	-	-2.341.035	-2.341.035
Exchange gain or loss	-12.752	-3	-68.405	-81.160
Position as at 31 December 2020	**38.831.454**	**34.657.441**	**50.076.206**	**123.565.101**
of which:				
Retail customers	*2.836.479*	*12.489.890*	*11.281.246*	*26.607.616*
Corporate customers	*35.860.177*	*22.167.552*	*38.794.959*	*96.822.688*
Public sector	*134.798*	*-*	*-*	*134.798*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Retail customers	**89.202.494**	**-125.812.644**	**36.610.150**	**-**
Transfer from Stage 1	*-647.971.764*	*629.575.502*	*18.396.262*	-
Transfer from Stage 2	*729.568.030*	*-759.733.768*	*30.165.738*	-
Transfer from Stage 3	*7.606.228*	*4.345.622*	*-11.951.850*	-
Corporate customers	**-282.926.146**	**225.423.376**	**57.502.770**	**-**
Transfer from Stage 1	*-346.931.914*	*338.015.790*	*8.916.124*	-
Transfer from Stage 2	*63.638.890*	*-113.761.762*	*50.122.871*	-
Transfer from Stage 3	*366.878*	*1.169.348*	*-1.536.225*	-
Public sector	**356.929**	**-356.929**	**-**	**-**
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	*356.929*	*-356.929*	-	-
Transfer from Stage 3	-	-	-	-

Outstanding amounts covered by provisions at 31 December 2020	Stage 1	Stage 2	Stage 3	Total
Retail customers	15.384.307.943	1.255.748.515	91.774.297	16.731.830.755
Corporate customers	5.057.610.311	616.644.210	190.170.749	5.864.425.270
Public sector	1.626.246.641	-	-	1.626.246.641

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2021	**38.831.454**	**34.657.441**	**50.076.206**	**123.565.101**
of which:				
Retail customers	*2.836.479*	*12.489.890*	*11.281.246*	*26.607.616*
Corporate customers	*35.860.177*	*22.167.552*	*38.794.959*	*96.822.688*
Public sector	*134.798*	-	-	*134.798*
Changes	**-9.059.104**	**-654.952**	**-1.227.982**	**-10.942.038**
Increase due to acquisition and origination	11.536.658	3.066.847	551.937	15.155.442
Decrease due to repayment	-1.674.545	-2.308.198	-1.872.320	-5.855.063
Change related to credit risk	-18.941.847	-1.521.474	1.514.511	-18.948.809
Other changes	-	107.872	350.124	457.996
Depreciation	-	-	-1.718.045	-1.718.045
Exchange gain or loss	20.630	1	-54.190	-33.559
Position as at 31 December 2021	**29.772.350**	**34.002.490**	**48.848.223**	**112.623.064**
of which:				
Retail customers	*4.299.761*	*17.507.256*	*10.626.887*	*32.433.904*
Corporate customers	*25.399.672*	*16.495.234*	*38.221.337*	*80.116.243*
Public sector	*72.917*	-	-	*72.917*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Retail customers	**-13.986.475**	**1.779.840**	**12.206.635**	**-**
Transfer from Stage 1	*-621.969.848*	*611.065.352*	*10.904.496*	-
Transfer from Stage 2	*600.459.931*	*-620.668.134*	*20.208.203*	-
Transfer from Stage 3	*7.523.442*	*11.382.622*	*-18.906.064*	-
Corporate customers	**14.930.648**	**-29.352.318**	**14.421.670**	**-**
Transfer from Stage 1	*-114.924.016*	*106.952.506*	*7.971.510*	-
Transfer from Stage 2	*129.500.692*	*-138.986.626*	*9.485.933*	-
Transfer from Stage 3	*353.972*	*2.681.801*	*-3.035.773*	-
Public sector	**-**	**-**	**-**	**-**
Transfer from Stage 1	-	-	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-

Outstanding amounts covered by provisions at 31 December 2021	Stage 1	Stage 2	Stage 3	Total
Retail customers	16.882.727.568	1.295.480.011	85.686.891	18.263.894.470
Corporate customers	5.231.986.175	482.214.358	157.060.842	5.871.261.375
Public sector	1.224.160.456	-	-	1.224.160.456

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 31/12/2020	Performing restructured loans		Non-performing restructured loans		Total restructured loans	
	Loan	Impairment	Loan	Impairment	Loan	Impairment
Retail customers	89.446.448	596.372	25.588.178	1.073.831	115.034.626	1.670.203
Corporate customers	37.305.196	5.979.626	146.226.989	12.846.490	183.532.185	18.826.116
Total	**126.751.644**	**6.575.998**	**171.815.167**	**13.920.321**	**298.566.811**	**20.496.319**

At 31/12/2021	Performing restructured loans		Non-performing restructured loans		Total restructured loans	
	Loan	Impairment	Loan	Impairment	Loan	Impairment
Retail customers	113.844.005	427.278	23.841.506	1.176.609	137.685.511	1.603.887
Corporate customers	90.167.985	3.840.454	113.047.835	13.696.264	203.215.820	17.536.718
Total	**204.011.990**	**4.267.732**	**136.889.341**	**14.872.873**	**340.901.331**	**19.140.605**

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 of up to one year and those with a maturity of more than one year.

Assets	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Non-derivative financial instruments	-	-	-	-	-	-
Derivative financial instruments (note 4.12)	60.652.676	78.064.357	138.717.034	178.066.602	57.176.033	235.242.636
Total	**60.652.676**	**78.064.357**	**138.717.034**	**178.066.602**	**57.176.033**	**235.242.636**

Liabilities	31/12/2020			31/12/2021		
Non-derivative financial instruments	-	-	-	-	-	-
Derivative financial instruments (note 4.12)	286.513.171	80.130.571	366.643.742	67.185.355	62.750.584	129.935.939
Total	**286.513.171**	**80.130.571**	**366.643.742**	**67.185.355**	**62.750.584**	**129.935.939**

4.5 Financial assets mandatorily recognised at fair value through profit or loss

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Debt instruments	**310.088.052**	**480.305.932**	**790.393.984**	**199.394.529**	**403.400.083**	**602.794.612**
Public sector	-	*151.913.360*	*151.913.360*	*10.049.038*	*139.386.110*	*149.435.148*
Credit institutions	*188.598.998*	*289.062.485*	*477.661.483*	*19.360.749*	*221.569.720*	*240.930.469*
Corporate customers	*121.489.054*	*39.330.087*	*160.819.141*	*169.984.742*	*42.444.253*	*212.428.995*
Loans and advances	**-**	**18.642.898**	**18.642.898**	**-**	**29.661.322**	**29.661.322**
Public sector	-	-	-	-	-	-
Credit institutions	-	-	-	-	-	-
Corporate customers	-	*18.642.898*	*18.642.898*	-	*29.661.322*	*29.661.322*
Total	**310.088.052**	**498.948.830**	**809.036.882**	**199.394.529**	**433.061.405**	**632.455.934**
of which unrealised valuation at the reporting date	*2.555.067*	*-5.078.963*	*-2.523.896*	*12.760.464*	*-5.173.664*	*7.586.800*

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	2020	2021
Position as at 1 January	**1.221.106.207**	**790.393.984**
Acquisitions	162.710.843	87.415.093
Sales	-71.822.059	-687.896
Repayments	-514.600.470	-284.246.503
Realised profit/(loss)	-2.261.815	-495.320
Pro-rata interest	1.688.782	-758.641
Unrealised valuations	-5.474.988	10.400.964
Exchange gain or loss	-952.517	772.930
Position as at 31 December	**790.393.984**	**602.794.611**

4.6 Fixed-income securities recognised at amortised cost

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Debt instruments	**2.794.583.281**	**11.238.947.192**	**14.033.530.473**	**2.086.918.071**	**11.735.010.285**	**13.821.928.357**
Public sector	*286.244.229*	*2.659.080.377*	*2.945.324.606*	*207.504.153*	*2.760.984.834*	*2.968.488.987*
Credit institutions	*1.947.478.231*	*4.501.230.143*	*6.448.708.374*	*1.351.008.951*	*4.566.284.620*	*5.917.293.571*
Corporate customers	*560.860.821*	*4.078.636.672*	*4.639.497.493*	*528.404.967*	*4.407.740.831*	*4.936.145.798*
Total	**2.794.583.281**	**11.238.947.192**	**14.033.530.473**	**2.086.918.071**	**11.735.010.285**	**13.821.928.357**
of which unrealised valuation (interest-rate component) for the purposes of hedge accounting	*6.900.766*	*247.637.866*	*254.538.632*	*3.871.884*	*49.494.323*	*53.366.207*
of which impairment of financial assets	*-2.604.983*	*-18.383.866*	*-20.988.849*	*-866.250*	*-8.233.940*	*-9.100.190*

Breakdown of changes in carrying amount:

Debt instruments	2020	2021
Position as at 1 January	**13.482.939.931**	**14.033.530.474**
Acquisitions	4.357.526.943	2.927.064.279
Sales	-22.463.090	-10.005.500
Repayments	-3.717.090.938	-3.021.326.820
Realised profit/(loss)	-158.951	1.277.739
Pro-rata interest	-30.816.709	-27.149.990
Unrealised valuations of hedges	70.086.569	-202.450.163
Impairment	-11.713.285	11.888.659
Exchange gain or loss	-94.779.997	109.099.679
Position as at 31 December	**14.033.530.474**	**13.821.928.357**

Table detailing the provisioning:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2020	**8.588.300**	**483.944**	**203.513**	**9.275.758**
of which:				
Public sector	*454.164*	*-*	*-*	*454.164*
Credit institutions	*4.892.129*	*-*	*-*	*4.892.129*
Corporate customers	*3.242.008*	*483.944*	*203.513*	*3.929.465*
Changes	**11.208.481**	**504.814**	**-204**	**11.713.091**
Increase due to acquisition and origination	4.697.200	-	-	4.697.200
Decrease due to repayment	-251.305	-	-	-251.305
Change related to credit risk	6.813.228	504.814	-204	7.317.838
Other net changes	-	-	-	-
Depreciation	-	-	-	-
Exchange gain or loss	-50.642	-	-	-50.642
Position as at 31 December 2020	**19.796.781**	**988.758**	**203.310**	**20.988.849**
of which				
Public sector	*1.076.874*	*-*	*-*	*1.076.874*
Credit institutions	*10.065.718*	*-*	*-*	*10.065.718*
Corporate customers	*8.654.189*	*988.758*	*203.310*	*9.846.257*

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	**-31.446.712**	**31.446.712**	**-**	**-**
Transfer from Stage 1	-34.439.693	34.439.693	-	-
Transfer from Stage 2	*2.992.980*	*-2.992.980*	-	-
Transfer from Stage 3	-	-	-	-

Exposure by stage at 31 December 2020	Stage 1	Stage 2	Stage 3	Total
Public sector	2.946.401.481	-	-	2.946.401.481
Credit institutions	6.458.774.091	-	-	6.458.774.091
Corporate customers	4.614.700.748	34.439.693	203.310	4.649.343.750

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2021	**19.796.781**	**988.758**	**203.310**	**20.988.849**
of which:				
Public sector	*1.076.874*	-	-	*1.076.874*
Credit institutions	*10.065.718*	-	-	*10.065.718*
Corporate customers	*8.654.189*	*988.758*	*203.310*	*9.846.257*
Changes	**-11.397.921**	**-493.202**	**-14**	**-11.891.137**
Increase due to acquisition and origination	2.842.526	-	-	2.842.526
Decrease due to repayment	-195.750	-	-	-195.750
Change related to credit risk	-14.079.671	-493.202	-14	-14.572.887
Other net changes	-	-	-	-
Depreciation	-	-	-	-
Exchange gain or loss	34.974	-	-	34.974
Position as at 31 December 2021	**8.398.860**	**495.556**	**203.296**	**9.097.712**
of which				
Public sector	*760.685*	-	-	*760.685*
Credit institutions	*4.219.731*	-	-	*4.219.731*
Corporate customers	*3.420.923*	*495.556*	*203.296*	*4.119.775*

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	**-5.164.207**	**5.164.207**	**-**	**-**
Transfer from Stage 1	-5.164.207	5.164.207	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-

Exposure by stage at 31 December 2021	Stage 1	Stage 2	Stage 3	Total
Public sector	2.969.249.672	-	-	2.969.249.672
Credit institutions	5.921.513.302	-	-	5.921.513.302
Corporate customers	4.900.871.591	39.190.685	203.296	4.940.265.572

4.7 Fixed-income securities recognised at fair value through the revaluation reserve

This item includes debt instruments in the form of variable-rate, fixed-rate and other interest-rate bonds subject to compliance with the SPPI criterion in the context of the hold-to-collect-and-sell (HTC&S) business model.

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Debt instruments	**-**	**18.042.494**	**18.042.494**	**-**	**17.534.900**	**17.534.900**
Public sector	-	*18.042.494*	*18.042.494*	-	*17.534.900*	*17.534.900*
Credit institutions		-	-		-	-
Corporate customers	-	-	-	-	-	-
Total	**-**	**18.042.494**	**18.042.494**	**-**	**17.534.900**	**17.534.900**
of which unrealised valuation at the reporting date	-	*518.055*	*518.055*	-	*18.260*	*18.260*

Breakdown of changes in carrying amount:

Debt instruments	2020	2021
Position as at 1 January	**16.069.764**	**18.042.494**
Acquisitions	12.446.525	-
Repayments	-11.000.000	-
Pro-rata interest	-7.871	-7.798
Unrealised valuations	534.077	-499.796
Exchange gain or loss	-	-
Position as at 31 December	**18.042.494**	**17.534.900**

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

Headings	31/12/2020	31/12/2021
Equity instruments	**858.764.091**	**1.125.045.988**
Credit institutions	*4.018.037*	*6.502.040*
Corporate	*854.746.054*	*1.118.543.948*
Total	**858.764.091**	**1.125.045.988**
of which unrealised valuation through the revaluation reserve	*558.135.840*	*841.675.375*
Dividends received during the period	15.084.878	22.229.900
of which dividends from positions sold during the period	*-*	*206.315*
Gains/losses on sales in equity	-13.548.191	20.391.135

Breakdown of changes in carrying amount:

Equity instruments	2020	2021
Position as at 1 January	**820.716.989**	**858.764.091**
Acquisitions	-	2.726.193
Sales	-28.990.235	-22.887.231
Transfers to non-current assets and disposal groups classified as held for sale	-	-815.634
Profit/(loss) realised through own funds	-13.548.191	20.391.135
Unrealised valuations	84.788.598	263.148.401
Exchange gain or loss	-4.203.070	3.719.032
Position as at 31 December	**858.764.091**	**1.125.045.988**

4.9 Investments in associates accounted for using the equity method

	31/12/2020	31/12/2021
Acquisition value on 1 January	**56.433.552**	**53.838.552**
Establishment	2.405.000	6.858.995
Disposals	-5.000.000	-39.563
Total (as acquisition value)	**53.838.552**	**60.657.983**

List of associates:

Associates	Fraction of capital held (%)	Acquisition value	Equity-accounted value 2021
Société Nationale de Circulation Automobile S.à r.l.	20,00	24.789	8.885.220
Luxair S.A.	21,81	14.830.609	251.275.986
Société de la Bourse de Luxembourg S.A.	25,35	6.979.907	33.127.925
Europay Luxembourg S.C.	30,10	188.114	921.826
European Fund Administration S.A.	31,51	5.652.108	5.134.048
LuxHub S.A.	32,50	3.705.000	2.158.214
Visalux S.C.	35,36	373.071	4.517.070
Lalux Group S.A.	40,00	28.904.385	265.495.168
Total		**60.657.983**	**571.515.457**

Associates	Fraction of capital held (%)	Acquisition value	Equity-accounted value 2020
Société Nationale de Circulation Automobile S.à r.l.	20,00	24.789	8.372.277
Luxair S.A.	21,81	14.830.609	148.032.343
Société de la Bourse de Luxembourg S.A.	22,75	128.678	28.536.009
Europay Luxembourg S.C.	30,10	188.114	869.528
European Fund Administration S.A.	31,67	5.691.671	4.623.648
LuxHub S.A.	32,50	3.705.000	2.242.004
Visalux S.C.	34,66	365.305	6.501.920
Lalux Group S.A.	40,00	28.904.385	249.881.296
Total		**53.838.552**	**449.059.026**

With one exception, the financial statements of associates have been restated to comply with IFRS 9. That exception is the Lalux Group S.A. entity, which refers to Regulation (EU) 2017/1988 published in the official journal on 9 November 2017, 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 up to and including financial year 2022.

In 2021, Spuerkeess increased its stake in Société de la Bourse du Luxembourg S.A. and sold an insignificant percentage of its stake in European Fund Administration S.A.

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	2021			
	Net income from continuing operations	Net income after tax from discontinued operations	Other items of comprehensive income	Total comprehensive income
Direct interests	**121.155.292**	**-**	**11.792.309**	**132.947.601**
Société Nationale de Circulation Automobile S.à r.l.	531.516	-	-18.573	512.943
Luxair S.A.	90.612.491	-	12.631.152	103.243.643
Société de la Bourse de Luxembourg S.A.	2.854.568	-	-3.823.281	-968.713
Europay Luxembourg S.C.	7.687	-	44.611	52.298
European Fund Administration S.A.	549.738	-	225	549.963
LuxHub S.A.	-156.997		73.207	-83.790
Visalux S.C.	63.016	-	-2.055.631	-1.992.615
Lalux Group S.A.	26.693.273	-	4.940.599	31.633.872
Total	**121.155.292**	**-**	**11.792.309**	**132.947.601**

Associates	2020			
	Net income from continuing operations	Net income after tax from discontinued operations	Other items of comprehensive income	Total comprehensive income
Direct interests	**45.813.491**	**-**	**-958.803**	**44.854.688**
Société Nationale de Circulation Automobile S.à r.l.	714.462	-	35.675	750.137
Luxair S.A.	16.288.644	-	4.612.101	20.900.745
Société de la Bourse de Luxembourg S.A.	2.909.462	-	-5.296	2.904.166
Europay Luxembourg S.C.	19.502	-	45.343	64.845
European Fund Administration S.A.	-1.172.732	-	-20.642	-1.193.374
LuxHub S.A.	-449.130		-7.696	-456.826
Visalux S.C.	20.037	-	-683.394	-663.357
Lalux Group S.A.	27.483.246	-	-9.220.496	18.262.750
BioTechCube (BTC) Luxembourg S.A.	-	-	4.285.601	4.285.601
Total	**45.813.491**	**-**	**-958.803**	**44.854.688**

4.10 Securities collateralised

- Securities collateralised in the framework of repurchase agreements

Headings	31/12/2020	31/12/2021
Debt instruments issued by the public sector	140.592.716	106.494.613
Debt instruments issued by credit institutions	17.574.070	100.864.180
Debt instruments issued - other	17.667.270	106.482.665
Total	**175.834.056**	**313.841.458**

The debt instruments issued are primarily "fixed-income securities recognised at amortised cost".

The increase observed in debt instruments stems from the higher number of collateral security agreements as at 31 December 2021.

- **Securities lent and other collateral**

Headings	31/12/2020	31/12/2021
Securities lending		
Debt instruments issued by the public sector	145.647.174	531.834.490
Debt instruments issued by credit institutions	253.799.470	-
Debt instruments issued - other	25.771.250	81.903.436
Total	**425.217.894**	**613.737.926**

4.11 Convertible bonds included in the different portfolios

The Group did not hold any convertible bonds as at 31 December 2021 or 31 December 2020.

4.12 Derivative instruments

With regard to financial derivatives, the Group distinguishes between financial instruments held for trading and hedging derivatives. Financial derivatives held for trading are held exclusively against transactions (economic hedging) and not for speculative purposes. Hedging derivatives should be separated into:

- Fair value hedges: 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 hedges: 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 paragraph 3.2.2.

Categories at 31/12/2021	Assets	Liabilities	Notional
Derivative financial instruments held for trading	**235.242.636**	**129.935.939**	**16.053.773.594**
Operations linked to exchange rates	179.171.805	72.393.846	14.941.716.202
- Foreign exchange swaps and forward exchange contracts	*178.720.366*	*70.370.571*	*14.907.947.024*
- CCIS	*451.439*	*2.023.276*	*33.769.178*
- other	-	-	-
Operations linked to interest rates	56.070.831	57.542.093	1.112.057.392
- IRS	*56.070.831*	*57.211.750*	*1.108.582.066*
- other	-	*330.343*	*3.475.326*
Operations linked to equity	-	-	-
- Equity and index options			
Fair value hedging derivatives	**88.106.646**	**822.798.490**	**13.846.327.649**
Operations linked to exchange rates	25.497.492	236.300.114	2.275.312.909
- CCIS	*25.497.492*	*236.300.114*	*2.275.312.909*
Operations linked to interest rates	62.609.154	586.498.376	11.571.014.740
- IRS	*62.609.154*	*586.498.376*	*11.571.014.740*
Cash flow hedging derivatives	**2.088.394**	**4.879.779**	**116.944.118**
Operations linked to exchange rates	1.058.407	4.879.779	102.544.118
- CCIS	*1.058.407*	*4.879.779*	*102.544.118*
Operations linked to interest rates	1.029.987	-	14.400.000
- IRS	*1.029.987*	-	*14.400.000*

Categories on 31/12/2020	Assets	Liabilities	Notional
Derivative financial instruments held for trading	**138.717.034**	**366.643.742**	**16.283.500.722**
Operations linked to exchange rates	61.169.505	286.798.005	14.811.755.505
- Foreign exchange swaps and forward exchange contracts	*60.327.401*	*286.798.005*	*14.803.109.295*
- CCIS	*842.104*	-	*8.646.210*
- other	-	-	-
Operations linked to interest rates	76.171.890	78.470.099	1.464.347.976
- IRS	*75.804.806*	*77.772.031*	*1.356.767.877*
- other	*367.084*	*698.068*	*107.580.099*
Operations linked to equity	1.375.638	1.375.638	7.397.241
- Equity and index options	*1.375.638*	*1.375.638*	*7.397.241*
Fair value hedging derivatives	**67.420.425**	**1.105.132.402**	**13.141.586.570**
Operations linked to exchange rates	40.738.470	159.304.476	1.983.666.551
- CCIS	*40.738.470*	*159.304.476*	*1.983.666.551*
Operations linked to interest rates	26.681.955	945.827.926	11.157.920.020
- IRS	*26.681.955*	*945.827.926*	*11.157.920.020*
Cash flow hedging derivatives	**5.418.070**	**6.942.805**	**157.054.734**
Operations linked to exchange rates	3.587.998	6.942.805	137.654.734
- CCIS	*3.587.998*	*6.942.805*	*137.654.734*
Operations linked to interest rates	1.830.072	-	19.400.000
- IRS	*1.830.072*	-	*19.400.000*

Fair value hedges at 31/12/2021		Balance sheet categories	Type of hedge	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	Micro-hedge	122.558.653	181.984.928	-183.106.203	-1.121.275	100,62%
			Macro-hedge	169.696.251	217.239.017	-215.654.849	1.584.168	99,27%
	Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	-6.761.254	-14.768.733	14.818.147	49.414	100,33%
Currency risk								
	Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost, Loans and advances at amortised cost – Customers	Micro-hedge	17.965.112	69.349.513	-69.472.736	-123.223	100,18%
	Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	-943.716	1.308.248	-1.299.804	8.444	99,35%

Cash flow hedges at 31/12/2021		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	799.619	-	-1.028.094	-
Currency risk						
	Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost	-2.500.651	-	-32.425	-

Fair value hedges at 31/12/2020		Balance sheet categories	Type of hedge	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	Micro-hedge	305.664.856	-44.985.087	48.184.100	3.199.013	103,45%
			Macro-hedge	385.746.991	-155.979.525	159.722.221	3.742.696	102,40%
	Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	-21.579.401	7.905.988	-7.974.056	-68.068	100,86%
Currency risk								
	Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost, Loans and advances at amortised cost – Customers	Micro-hedge	87.437.847	-40.895.026	41.090.470	195.444	100,48%
	Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	356.089	-356.337	354.684	-1.653	99,54%

Cash flow hedges at 31/12/2020		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	746.540	-	-1.827.713	-
Currency risk						
	Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost	1.102.713	-	2.468.226	-

Income on hedging activities recognised in net income and other comprehensive income at 31/12/2021	Net income or other comprehensive income
Fair value hedging (micro + macro hedging)	**397.528**
gains (losses) on hedging instruments	455.189.934
gains (losses) on hedged instruments related to the hedged risk	-454.715.444
ineffective part	-76.961
Cash flow hedges	**-1.701.032**
ineffective part	-
effective part	-1.701.032
reclassified in profit or loss over the period	-

Reconciliation of the equity component at 31/12/2021	Cash flow hedges recognised in revaluation reserve
Balance at 1 January 2021	**-640.514**
Change in fair value related to hedging of:	1.701.032
interest rate risk	*-799.619*
foreign exchange risk	*2.500.651*
Amount reclassified to profit or loss related to hedging of:	-
interest rate risk	-
foreign exchange risk	-
Balance at 31 December 2021	**1.060.518**

Income on hedging activities recognised in net income and other comprehensive income at 31/12/2020	Net income or other comprehensive income
Fair value hedging (micro + macro hedging)	**7.067.431**
gains (losses) on hedging instruments	-235.456.338
gains (losses) on hedged instruments related to the hedged risk	241.377.419
ineffective part	1.146.351
Cash flow hedges	**1.849.253**
ineffective part	-
effective part	1.849.253
reclassified in profit or loss over the period	-

Reconciliation of the equity component at 31/12/2020	Cash flow hedges recognised in revaluation reserve
Balance at 1 January 2020	**1.208.739**
Change in fair value related to hedging of:	-1.849.253
interest rate risk	*-746.540*
foreign exchange risk	*-1.102.713*
Amount reclassified to profit or loss related to hedging of:	-
interest rate risk	-
foreign exchange risk	-
Balance at 31 December 2020	**-640.514**

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

Headings	31/12/2020	31/12/2021
Assets: Change in fair value of a portfolio of financial instruments hedged against interest rate risk	373.811.797	156.504.244
Total	**373.811.797**	**156.504.244**

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 2020 and 2021 is due primarily to a volume effect and to the change in the interest-rate curves used to determine fair value.

4.14 Tangible assets for own use

	Land and buildings		Other equipment and furniture	Total
	Property for own use	Right-of-use assets arising from leases		
Position as at 1 January 2021	**388.958.977**	**17.735.016**	**64.870.258**	**471.564.252**
Increase	2.999.302	983.899	5.950.408	9.933.609
Exceptional transfers	8.971	-	-	8.971
Decrease	-2.916.928	-	-10.039.487	-12.956.415
Position as at 31 December 2021	**389.050.322**	**18.718.915**	**60.781.179**	**468.550.417**
Accumulated depreciation				
Position as at 1 January 2021	**156.845.242**	**6.502.839**	**35.005.219**	**198.353.300**
Depreciation	-2.711.984	-	-9.491.322	-12.203.306
Depreciation expense	11.834.152	2.987.153	10.421.669	25.242.974
Position as at 31 December 2021	**165.967.409**	**9.489.991**	**35.935.566**	**211.392.966**
Net book value				
Position as at 1 January 2021	**232.113.735**	**11.232.177**	**29.865.039**	**273.210.952**
Position as at 31 December 2021	**223.082.913**	**9.228.924**	**24.845.613**	**257.157.451**

	Land and buildings		Other equipment and furniture	Total
	Property for own use	Right-of-use assets arising from leases		
Position as at 1 January 2020	**393.147.786**	**16.936.305**	**65.887.561**	**475.971.653**
Increase	2.151.019	798.711	12.140.792	15.090.521
Decrease	-6.339.827	-	-13.158.095	-19.497.922
Position as at 31 December 2020	**388.958.977**	**17.735.016**	**64.870.258**	**471.564.252**
Accumulated depreciation				
Position as at 1 January 2020	**151.649.541**	**3.289.044**	**38.319.145**	**193.257.730**
Depreciation	-6.340.558	-	-13.236.028	-19.576.586
Exceptional transfers	-137.474	-	-	-137.474
Depreciation expense	11.673.733	3.213.795	9.922.102	24.809.630
Position as at 31 December 2020	**156.845.242**	**6.502.839**	**35.005.219**	**198.353.300**
Net book value				
Position as at 1 January 2020	**241.498.245**	**13.647.262**	**27.568.417**	**282.713.923**
Position as at 31 December 2020	**232.113.735**	**11.232.177**	**29.865.039**	**273.210.952**

4.15 Investment property

Position as at 1 January 2021	**23.044.912**
Increase (acquisitions)	-
Increase (investment expenditure)	-
Exceptional transfers	-8.971
Decrease	-
Position as at 31 December 2021	**23.035.942**
Accumulated depreciation	
Position as at 1 January 2021	**11.806.662**
Depreciation	-
Depreciation expense	798.615
Position as at 31 December 2021	**12.605.278**
Net book value	
Position as at 1 January 2021	**11.238.250**
Position as at 31 December 2021	**10.430.664**

Position as at 1 January 2020	**29.354.045**
Increase (acquisitions)	-
Increase (investment expenditure)	242.887
Decrease	-6.552.020
Position as at 31 December 2020	**23.044.912**
Accumulated depreciation	
Position as at 1 January 2020	**17.323.471**
Depreciation	-6.552.020
Exceptional transfers	137.474
Depreciation expense	897.738
Position as at 31 December 2020	**11.806.662**
Net book value	
Position as at 1 January 2020	**12.030.574**
Position as at 31 December 2020	**11.238.250**

Rental income from rented investment property amounted to EUR 3.064.100 for the 2021 financial year, versus EUR 2.950.001 in the prior year. Maintenance costs related to investment property were EUR 264.065 in 2021, compared with EUR 166.542 one year earlier.

The fair value of investment property stood at EUR 88.823.218 at year-end 2021, compared with EUR 81.906.577 at end-2020. 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.

4.16 Intangible assets

Position as at 1 January 2021	**69.323.287**
Increase	22.604.546
Decrease	-12.112.475
Position as at 31 December 2021	**79.815.358**
Accumulated depreciation	
Position as at 1 January 2021	**37.046.541**
Depreciation	-12.112.475
Depreciation expense	20.681.257
Position as at 31 December 2021	**45.615.323**
Net book value	
Position as at 1 January 2021	**32.276.746**
Position as at 31 December 2021	**34.200.035**

Position as at 1 January 2020	**60.144.617**
Increase	19.936.683
Decrease	-10.758.013
Position as at 31 December 2020	**69.323.287**
Accumulated depreciation	
Position as at 1 January 2020	**30.745.555**
Depreciation	-10.758.013
Depreciation expense	17.059.000
Position as at 31 December 2020	**37.046.541**
Net book value	
Position as at 1 January 2020	**29.399.062**
Position as at 31 December 2020	**32.276.746**

The depreciation expense related to intangible assets is recognised under "Allowances for impairment of tangible and intangible assets" in the income statement.

4.17 Non-current assets and disposal groups classified as held for sale

The Group's parent company recognises tangible assets and financial assets held for sale in the near term under this heading.

The Group's parent company did not recognise any assets under this heading in 2020, while in 2021 an investment affected by a buyback programme was included as at 30 June 2021 and the sale took place in the second half of the year.

	2020	2021
Position as at 1 January	-	-
Sales	-	-815.634
Transfers	-	815.634
Profit/(loss) realised through own funds	-	4.322.048
Unrealised valuations	-	-4.322.048
Exchange gain or loss	-	-
Position as at 31 December	-	-

4.18 Taxes: Tax assets and liabilities

Whereas current tax is a current 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 70.166.184 as at 31 December 2021 versus EUR 64.730.960 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 change in net assets of the balance sheet items valued through profit or loss and in income from the sale of securities not reclassified in the income statement. The overall tax burden of corporations at the nominal tax rate has been 24,94% since financial year 2019.

As at 31 December 2021, the Group posted a deferred tax asset of EUR 140.639.406, and a deferred tax liability of EUR 114.581.540.

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	01/01/2020	Movements in equity	Movements in income statement	31/12/2020
Deferred tax assets	149.322.883	9.279.610	-9.985.298	148.617.197
Deferred tax liabilities	-128.499.977	-4.406.606	9.622.902	-123.283.681
Net deferred tax assets / liabilities	**20.822.906**	**4.873.004**	**-362.396**	**25.333.516**

Headings	01/01/2021	Movements in equity	Movements in income statement	31/12/2021
Deferred tax assets	148.617.197	1.838.353	-9.816.145	140.639.406
Deferred tax liabilities	-123.283.681	-5.617.578	14.319.719	-114.581.540
Net deferred tax assets / liabilities	**25.333.516**	**-3.779.225**	**4.503.574**	**26.057.865**

4.18.1 Tax assets

Headings	31/12/2020	31/12/2021
Current taxes	64.730.960	70.166.184
Income tax	*52.377.969*	*9.735.348*
Municipal business tax	*12.373.857*	*60.451.701*
Wealth tax	*-20.866*	*-20.865*
Deferred taxes	148.617.197	140.639.406
Tax assets	**213.348.157**	**210.805.590**

Breakdown of deferred tax assets according to origin:

Headings	31/12/2020	31/12/2021
Derivative financial instruments - application of fair value	615.576	1.415
Debt instruments - application of fair value	-	6.682
Equity instruments - application of fair value	2.398.713	55.464
Actuarial gains/losses relating to employee benefits	135.503.948	140.575.845
Deferred tax assets due to FTA	10.098.960	-
Deferred tax assets	**148.617.197**	**140.639.406**

4.18.2 Tax liabilities

Breakdown of deferred tax liabilities according to origin:

Headings	31/12/2020	31/12/2021
Derivative financial instruments - application of fair value	455.832	265.908
Debt instruments - application of fair value	129.821	4.496.709
Equity instruments - application of fair value	1.429.917	541.472
Regulatory and other provisions	102.042.599	92.006.136
Actuarial gains/losses relating to employee benefits	11.769.546	17.271.316
Deferred tax liabilities due to FTA	7.455.966	-
Deferred tax liabilities	**123.283.681**	**114.581.542**

4.19 Other assets

Headings	31/12/2020	31/12/2021
Operational outstandings	9.977.159	9.105.526
Preferential or secured borrowers	522.292	84.050
Other	1.001	183.424
Total	**10.500.452**	**9.373.000**

4.20 Deposits at amortised cost – Credit institutions

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Inter-bank deposits	2.531.541.026	3.265.409.451	5.796.950.477	3.114.522.866	3.476.593.570	6.591.116.436
of which central bank deposits	*106.642.040*	*3.191.511.111*	*3.298.153.151*	*84.334.403*	*3.431.606.944*	3.515.941.347
Repurchase/Reverse repurchase agreements	37.199.154	-	37.199.154	274.918.033	-	274.918.033
Other financial liabilities	142.698.566	-	142.698.566	68.677.529	-	68.677.529
Total	**2.711.438.746**	**3.265.409.451**	**5.976.848.197**	**3.458.118.428**	**3.476.593.570**	**6.934.711.998**

The Group's parent company participated in the European Central Bank's Targeted Longer-Term Refinancing Operations (TLTRO) in 2020 and 2021.

The Group's parent company borrowed a notional amount of EUR 3,2 billion under the fourth tranche of TLTRO III for the three-year period from 24 June 2020 to 28 June 2023 with an early repayment option as from September 2021, as well as a notional amount of EUR 250 million under the eighth tranche of TLTRO III for the three-year period from 24 June 2021 to 28 June 2024 with an early repayment option as from September 2022.

With TLTRO III, the ECB modified its conditions and introduced optional special reference periods, along with special conditions regarding the growth rates required in the targeted loan categories and the return on the notional amount borrowed by the banks.

For TLTRO III.4, subject to meeting the condition of more than 0% growth in eligible lending for the specific reference period, the base rate of -50 basis points is halved for the first and second periods. This is also the case for TLTRO III.8, where the base rate is halved only in the first period.

For the two special reference periods, and given the conditions related to growth in the targeted loan categories, the Group's parent company applied a return of 50 + 50 basis points when calculating the amortised cost of these deposits.

The Group's parent company is providing this additional information while also noting that it does not consider the TLTRO to be a direct subsidy instrument but rather an instrument that provides access to liquidity if necessary.

The amounts of the TLTRO III deposits included in "Deposits at amortised cost – Credit institutions" are EUR 3.404.344.722. The Group's parent company has calculated accrued interest in the amount of EUR 37.166.389, included on the 2021 income statement under interest income.

4.21 Deposits at amortised cost – Customers

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Private sector	**28.135.279.295**	**471.201.433**	**28.606.480.728**	**29.970.562.262**	**311.944.686**	**30.282.506.948**
- Demand deposit and notice accounts	*13.191.854.902*	-	*13.191.854.902*	*14.930.291.692*	-	*14.930.291.692*
- Time deposit accounts	*820.743.316*	*471.201.433*	*1.291.944.749*	*1.161.359.211*	*311.944.686*	*1.473.303.896*
- Savings	*14.122.681.077*	-	*14.122.681.077*	*13.878.911.359*	-	*13.878.911.359*
- Repurchase/Reverse repurchase agreements	-	-	-	-	-	-
Public sector	**4.960.051.218**	**1.016.552.692**	**5.976.603.909**	**5.381.260.797**	**1.242.862.952**	**6.624.123.748**
Total	**33.095.330.513**	**1.487.754.125**	**34.583.084.637**	**35.351.823.058**	**1.554.807.637**	**36.906.630.696**

4.22 Financial liabilities designated at fair value through profit or loss

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Issues	-	172.175.873	172.175.873	-	165.001.798	165.001.798
Total	**-**	**172.175.873**	**172.175.873**	**-**	**165.001.798**	**165.001.798**
of which unrealised valuation at the reporting date	-	*15.026.358*	*15.026.358*	-	*6.047.038*	*6.047.038*

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	2020	2021
Position as at 1 January	**166.144.407**	**172.175.873**
Pro-rata interest	1.842.683	1.920.577
Unrealised valuations	4.347.384	-8.979.320
Exchange gain or loss	-158.602	-115.331
Position as at 31 December	**172.175.873**	**165.001.798**

4.23 Issuance of debt securities

Headings	31/12/2020			31/12/2021		
	=<1 year	> 1 year	Total	=<1 year	> 1 year	Total
Certificates of deposit	28.345.466	14.072.570	42.418.036	17.008.026	8.819.370	25.827.396
Commercial paper	2.457.679.693	-	2.457.679.693	2.304.743.639	-	2.304.743.639
Medium Term Notes and other securities issued	81.715.168	377.429.946	459.145.114	55.037.492	407.861.412	462.898.904
Total	**2.567.740.328**	**391.502.515**	**2.959.242.843**	**2.376.789.157**	**416.680.782**	**2.793.469.939**
of which subordinated notes	*41.010.462*	*50.008.687*	*91.019.148*	*49.997.126*	-	*49.997.126*

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

Since 2015, certificates of deposit are no longer marketed and are managed in run-off mode.

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

Issues	2020	2021
Position as at 1 January	**423.957.190**	**459.145.114**
Issues	81.037.500	100.306.000
Repayments/redemptions	-55.891.510	-82.760.000
Realised profit/(loss)	-	-
Pro-rata interest	3.501.056	510.386
Unrealised valuations	7.619.372	-13.518.343
Exchange gain or loss	-1.078.494	-784.254
Position as at 31 December	**459.145.114**	**462.898.902**

Breakdown of subordinated loans as at 31 December 2021

Description	Rate	Issue currency	Nominal amount issued - EUR	Assimilated portion - EUR	Non-assimilated portion - EUR
Loan 2002-2022	-	EUR	50.000.000	8.843.258	41.156.742
Total			**50.000.000**	**8.843.258**	**41.156.742**

The interest expense on subordinated notes was zero as at 31 December 2021, compared with EUR 85.165 as at 31 December 2020.

4.24 Provisions

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

Changes during the financial year:

	Provisions			
	Risks and charges	Time savings account	IFRS 9	Total
Position as at 1 January 2020	**2.083.093**	**10.273.033**	**11.740.207**	**24.096.333**
Additions	2.607.019	-	20.740.023	23.347.043
Reversals	-	-	-3.578.208	-3.578.208
Use	-	-	-16.419	-16.419
Expense included in personnel expenses	-	7.356.705	-	7.356.705
Position as at 31 December 2020	**4.690.112**	**17.629.738**	**28.885.603**	**51.205.454**
Position as at 1 January 2021	**4.690.112**	**17.629.738**	**28.885.603**	**51.205.454**
Additions	6.041.051	-	5.683.967	11.725.018
Reversals	-499.830	-	-18.218.053	-18.717.884
Use	-1.539.300	-	388	-1.538.913
Expense included in personnel expenses	-	5.429.381	-	5.429.381
Position as at 31 December 2021	**8.692.032**	**23.059.119**	**16.351.906**	**48.103.057**

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. The additions recognised for 2021 include a EUR 3.750.000 provision for an administrative penalty announced by the ECB against the Bank in July 2021. This penalty was definitively imposed in the first quarter of 2022 and was paid using the provision booked in 2021.

Details of IFRS 9 provisioning:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2020	**8.629.968**	**1.984.643**	**1.125.599**	**11.740.209**
Changes	**12.996.796**	**3.441.182**	**707.417**	**17.145.395**
Increase due to acquisition and origination	8.069.254	207.338	76.748	8.353.340
Decrease due to repayment	-3.023.406	-228.561	-326.217	-3.578.184
Change related to credit risk	7.967.368	3.462.432	956.885	12.386.685
Other changes	-	-24	-	-24
Exchange gain or loss	-16.420	-2	-	-16.422
Position as at 31 December 2020	**21.626.764**	**5.425.825**	**1.833.015**	**28.885.603**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	-101.353.014	100.170.892	1.182.122	-
Transfer from Stage 2	42.880.063	-46.353.973	3.473.910	-
Transfer from Stage 3	1.027.659	510.969	-1.538.628	-

Outstanding amounts covered by provisions	Stage 1	Stage 2	Stage 3	Total
Outstanding amounts as at 31 December 2020	7.404.927.563	231.290.603	12.502.457	7.648.720.623

Position as at 1 January 2021	**21.626.764**	**5.425.825**	**1.833.015**	**28.885.603**
Changes	**-10.407.048**	**-1.935.438**	**-191.211**	**-12.533.697**
Increase due to acquisition and origination	4.908.182	53.482	722.304	5.683.967
Decrease due to repayment	-4.657.123	-623.201	-1.066.158	-6.346.483
Change related to credit risk	-10.658.456	-1.365.757	151.646	-11.872.566
Other changes	-	-	997	997
Exchange gain or loss	350	38	-	388
Position as at 31 December 2021	**11.219.717**	**3.490.387**	**1.641.804**	**16.351.906**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	-52.856.043	51.459.010	1.397.033	-
Transfer from Stage 2	40.898.213	-41.352.169	453.955	-
Transfer from Stage 3	478.690	109.076	-587.766	-

Outstanding amounts covered by provisions	Stage 1	Stage 2	Stage 3	Total
Outstanding amounts as at 31 December 2021	7.368.599.476	242.422.160	11.435.513	7.622.457.148

4.25 Other liabilities

Headings	31/12/2020	31/12/2021
Operational outstandings	2.718.715	2.059.389
Preferential or secured creditors	20.555.510	19.860.534
Liabilities arising from leases	11.232.177	9.228.924
Other	4.651.330	2.833.511
Total	**39.157.732**	**33.982.358**

4.26 Provisions for employee benefits – Defined-benefit pension plan

Main estimates used to determine provisions for employee benefits:

Variables	31/12/2020	31/12/2021
Discount rate for active employees	0,80%	1,10%
Discount rate for beneficiaries	0,70%	0,95%
Salary increases (including indexation)	3,25%	3,25%
Pension increases (including indexation)	2,25%	2,25%
Induced yield	0,75%	1,03%

The induced yield of 1.03% in 2021 corresponds to the weighted average of the discount rates for working people and for annuitants as fixed at the end of the 2021 financial year.

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

Components	31/12/2020	31/12/2021
Current service cost	14.081.002	15.574.371
Interest cost	7.686.246	6.526.110
Induced yield	-4.596.753	-3.807.037
Total	**17.170.495**	**18.293.444**

Pension commitments:

	2020	2021
Commitments on 1 January	**816.237.677**	**871.804.452**
Current service cost	14.081.002	15.574.371
Interest cost	7.686.246	6.526.110
Benefits paid	-13.652.221	-14.260.407
Actuarial gains or losses	47.451.748	20.336.394
Commitments on 31 December	**871.804.452**	**899.980.920**

Civil servants' pension payments are initially made directly by the State to civil servants. Spuerkeess only recognises the payments when the amounts are repaid to the State. Hence, "Benefits paid" amounting to EUR 14.260.407 include the repayments to the Luxembourg State of civil servants' pensions in respect of the 2020 financial year.

Breakdown of actuarial gains and losses:

	2020	2021
Actuarial gains and losses arising from changes in actuarial assumptions	44.116.797	-61.211.648
- financial assumptions	*44.116.797*	*-61.211.648*
- demographic assumptions	-	-
Actuarial gains and losses arising from experience adjustments	3.334.951	81.548.042
Total actuarial gains and losses:	**47.451.748**	**20.336.394**

Sensitivity analysis of pension commitments:

Impact of changes in actuarial assumptions on the pension commitment as at 31/12/2021	Decrease	Increase
Change in average actuarial rate (-/+ 50 bps)	112.366.137	-95.095.558
Change in wage increase rate (-/+ 50 bps)	-80.474.801	93.041.507
Change in pension increase rate (-/+ 25 bps)	-40.710.914	43.496.781
Change in mortality tables (-/+ 1 year)	31.819.707	-31.265.546

Impact of changes in actuarial assumptions on the pension commitment on 31/12/2020	Decrease	Increase
Change in average actuarial rate (-/+ 50 bps)	112.005.709	-94.404.490
Change in wage increase rate (-/+ 50 bps)	-86.159.829	104.002.569
Change in pension increase rate (-/+ 25 bps)	-40.220.264	43.006.672
Change in mortality tables (-/+ 1 year)	32.109.034	-31.478.365

Maturity analysis of pension commitments:

	31/12/2020	31/12/2021
Average duration of the pension commitment	**23,86 years**	**23,13 years**
Analysis of maturities of commitments to be paid	**871.804.452**	**899.980.920**
pensions outstanding for the year	7.484.052	7.751.221
commitments to be paid within 12 months	14.623.789	21.749.372
commitments to be paid in 1-3 years	30.862.208	34.383.882
commitments to be paid in 3-6 years	50.697.973	56.872.291
commitments to be paid in 6-11 years	97.408.275	106.622.507
commitments to be paid in 11-16 years	106.559.644	112.739.779
commitments to be paid after 16 years	564.168.510	559.861.868

Pension plan assets:

	2020	2021
Assets on 1 January	**488.150.315**	**508.571.172**
Benefits paid	-13.652.221	-14.260.407
Contribution	11.996.344	11.850.216
Induced yield	4.596.753	3.807.037
Fair value gain / loss	17.479.982	22.060.024
Assets on 31 December	**508.571.172**	**532.028.042**

In 2021, Spuerkeess made an annual contribution of EUR 11.850.216 versus an annual contribution of EUR 11.996.344 in the previous year.

Pension plan investments:

2021	Credit institutions	Public sector	Corporate	Total
Fixed-income securities	75.017.042	147.714.039	48.670.047	271.401.128
Variable-income securities	-	-	221.453.429	221.453.429
Real estate investment	-	-	12.990.000	12.990.000
Other assets (primarily deposits)	26.183.485	-	-	26.183.485
Total	**101.200.527**	**147.714.039**	**283.113.476**	**532.028.042**

2020	Credit institutions	Public sector	Corporate	Total
Fixed-income securities	79.079.831	161.453.502	46.282.764	286.816.097
Variable-income securities	-	-	169.019.504	169.019.504
Real estate investment	-	-	12.130.223	12.130.223
Other assets (primarily deposits)	40.389.836	-	-	40.605.347
Total	**119.469.667**	**161.453.502**	**227.432.492**	**508.571.171**

Net pension commitments:

	2019	2020	2021
Pension commitments	816.237.677	871.804.452	899.980.920
Plan assets measured at fair value	-488.150.315	-508.571.171	-532.028.042
Unfinanced commitments	**328.087.362**	**363.233.281**	**367.952.878**

Stock of actuarial gains and losses:

Stock as at 1 January 2020	**466.156.545**
2020 net change	29.971.766
Stock as at 31 December 2020	**496.128.311**
Stock as at 1 January 2021	**496.128.311**
2021 net change	-1.723.630
Stock as at 31 December 2021	**494.404.681**

Spuerkeess's estimated total contribution to provisions for employee benefits for 2022 is EUR 14.049.000.

4.27 Related-party transactions

The related parties of the Group's parent company are equity-accounted associates, governmental institutions and the Group's key management personnel.

All transactions with related parties are completed under market conditions.

4.27.1 Relationships between the group's parent company and equity-accounted associates

	31/12/2020	31/12/2021
Deposits from associates	176.259.137	198.991.874
Total	**176.259.137**	**198.991.874**

	31/12/2020	31/12/2021
Loans from associates	20.073.540	33.717.677
Total	**20.073.540**	**33.717.677**

4.27.2 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 State controls the Group which, 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 while applying the provisions of paragraph 25 of IAS 24:

ASSETS	31/12/2020	31/12/2021
Loans and advances at amortised cost	2.092.719.269	1.221.754.276
Fixed-income securities recognised at amortised cost	555.053.434	685.116.872
Fixed-income securities recognised at fair value through the revaluation reserve	-	12.493.250
Other	2.197.142	642.069
TOTAL ASSETS	**2.649.969.845**	**1.920.006.467**

LIABILITIES	31/12/2020	31/12/2021
Deposits at amortised cost	4.442.226.255	5.744.859.908
TOTAL LIABILITIES	**4.442.226.255**	**5.744.859.908**

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

Compensation paid for offices held within the Group's parent company breaks down as follows:

	31/12/2020	31/12/2021
Board of Directors (9 members)	386.750	428.000
Executive Board (five members)	1.080.081	1.084.394
Total	**1.466.831**	**1.512.394**

4.27.4 Loans and advances granted to members of the Group's management and administrative bodies

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

	31/12/2020	31/12/2021
Board of Directors (9 members)	3.686.106	5.111.842
Executive Board (five members)	34.057	40.246
Total	**3.720.163**	**5.152.087**

4.28 Statutory Auditor's fees

	2020	2021
Statutory audit of the company and consolidated annual financial statements	656.812	706.026
Other audit services	169.288	185.102
Total	**826.100**	**891.128**

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

4.29 Direct fees and contributions related to the European Banking Union

Headings	2020	2021
European Central Bank supervision charges [1]	-	1.539.300
CSSF supervision charges	391.000	499.000
Single Resolution Board charges	206.348	181.805
Total	**597.348**	**2.220.105**
FGDL contribution	12.932.810	20.780.741
FRL contribution	17.151.220	21.351.826
Total	**30.084.030**	**42.132.567**

(1) The Group's parent company used the provision recorded in 2020 to pay the invoice for 2020 in 2021. Spuerkeess then recorded a EUR 1.681.051 provision for 2021.

4.30 Off-balance sheet items

Type of guarantees issued

Headings	31/12/2020	31/12/2021
Completion bonds	497.787.227	490.596.629
Letters of credit	81.374.447	92.675.362
Counter-guarantees	557.177.856	437.305.139
Other	16.759.254	29.262.164
Total	**1.153.098.783**	**1.049.839.294**

Commitments

Headings	31/12/2020	31/12/2021
Amounts subscribed and unpaid on securities, equity interests and shares in affiliated companies	12.344.160	12.564.764
Undrawn confirmed credits	6.473.177.679	6.544.953.090
Financing	*3.612.402.169*	*3.659.754.908*
Current accounts	*2.061.451.441*	*2.264.636.988*
Other	*799.324.069*	*620.561.194*
Documentary credits	10.100.000	15.100.000
Total	**6.495.621.840**	**6.572.617.854**

An amount of EUR 16.351.908 related to the calculation of expected credit losses was recorded in "Provisions" for financial year 2021, versus EUR 28.885.601 for the previous year.

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 [9]

(in euros)

5.1 Interest income

Interest received and similar income	2020	2021
Financial assets held for trading	198.721.632	90.647.515
Financial assets mandatorily measured at fair value through profit or loss	51.876	3.474.216
Financial assets recognised at fair value through the revaluation reserve	5.265	8.322
Fixed-income securities recognised at amortised cost	126.436.630	93.892.473
Receivables at amortised cost	381.397.180	384.505.890
Derivatives - Hedge accounting, interest rate risk	75.329.840	95.684.553
Other assets	1.502.507	1.432.880
Interest received on liability instruments	43.001.203	85.174.211
Total	**826.446.133**	**754.820.060**
of which interest calculated based on the effective interest rate	*785.186.878*	*698.970.762*

Interest paid and similar expenses	2020	2021
Financial liabilities held for trading	-85.151.780	-36.512.292
Financial liabilities designated at fair value through profit or loss	-2.712.876	-2.787.186
Liabilities at amortised cost - Deposits	-35.322.389	-12.295.652
Liabilities at amortised cost - Debt certificates	-51.911.117	-8.772.663
Liabilities at amortised cost - Subordinated loans	-29.008	-6.768
Derivatives - Hedge accounting, interest rate risk	-233.582.318	-255.754.546
Other liabilities	-74.317	-59.769
Interest paid on asset instruments	-27.918.131	-39.467.239
Total	**-436.701.936**	**-355.656.115**
of which interest calculated based on the effective interest rate	*-414.677.459*	*-323.279.324*

Interest income	389.744.197	399.163.945
Total interest received and similar income not recognised at fair value through the income statement	509.336.317	479.831.243
Total interest paid and similar expenses not recognised at fair value through the income statement	-87.336.831	-21.134.852

[9] 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 securities

Headings	2020	2021
Variable-income securities recognised at fair value through the revaluation reserve	15.881.134	23.095.100
Income from variable-income securities	**15.881.134**	**23.095.100**

5.3 Fee and commission income

Headings	2020	2021
Loan activities	60.684.091	64.978.035
Asset management	57.591.446	66.546.012
Investment fund activities	53.089.297	58.965.774
Demand deposit accounts and related activities	37.319.666	37.454.424
Insurance premiums	2.595.084	2.589.507
Other (*)	9.662.337	11.963.926
Total commissions received	**220.941.921**	**242.497.678**
Loan activities	-4.037.288	-3.982.644
Asset management	-21.825.586	-20.912.925
Investment fund activities	-10.427.479	-9.829.499
Demand deposit accounts and related activities	-8.741.632	-7.727.106
Other (*)	-4.402.268	-4.356.036
Total commissions paid	**-49.434.253**	**-46.808.210**
Total commissions	**171.507.668**	**195.689.468**

(*) mostly fees on derivative financial instruments.

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

Headings	2020	2021
Fixed-income securities recognised at amortised cost	-158.951	1.277.738
Fixed-income securities recognised at fair value through the revaluation reserve	1.740	-
Loans and advances at amortised cost	83.530	185.046
Financial liabilities at amortised cost	-	-5.051
Total	**-73.681**	**1.457.733**

5.5 Income from financial instruments held for trading

Headings	2020	2021
Equity instruments and related derivatives	5.367.344	-401.361
Foreign exchange instruments and related derivatives	-3.506.211	-1.571.223
Interest rate instruments and related derivatives	2.061.694	-5.167.863
Total	**3.922.827**	**-7.140.447**

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

Headings	2020	2021
Financial liabilities designated at fair value through profit or loss	-4.347.384	8.979.320
Total	**-4.347.384**	**8.979.320**

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

Headings	2020	2021
Fixed-income securities	529.634	-1.286.065
UCI units	-10.528.252	10.696.390
Loans and advances	258.229	205.053
Total	**-9.740.389**	**9.615.378**

5.8 Income from hedging transactions

Headings	2020	2021
Fair value hedge		
Debt instruments (assets) hedged by derivative financial instruments	1.431.581	-97.364
Debt issues hedged by derivative financial instruments	-69.720	57.858
Loans hedged by derivative financial instruments	5.705.572	437.034
Total	**7.067.433**	**397.528**
Value adjustment on hedged instruments	241.377.419	-454.715.444
Value adjustment on hedging instruments	-234.309.986	455.112.973
Total	**7.067.433**	**397.528**

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 4.12.

5.9 Other net operating income

Headings	2020	2021
Other operating income	15.385.398	10.810.701
Other operating expenditure	-2.760.159	-3.098.081
Other net operating income	**12.625.239**	**7.712.620**

"Other operating income and expenses" mainly include:

- the rent from property rented and miscellaneous advances from tenants,
- VAT repayments relating to previous financial years,
- income on amortised loans.

Income on amortised loans stood at EUR 408.075 for 2021 and at EUR 2.787.963 for 2020.

5.10 Personnel expenses

Headings	2020	2021
Compensation	197.158.198	200.156.673
Social security charges	6.776.599	7.478.408
Pensions and similar expenses	14.201.472	15.622.327
Provisions for employee benefits	17.170.495	18.293.444
Other personnel expenses	5.084.992	5.167.632
Total	**240.391.756**	**246.718.484**

5.11 Other general and administrative expenses

Headings	2020	2021
Expenses related to property and furniture	22.561.261	26.558.874
Rents and maintenance of software	26.434.638	32.934.565
Operating expenditure related to the banking business	31.052.342	33.573.659
Other	7.964.732	7.858.133
Total	**88.012.973**	**100.925.231**

5.12 Cash contributions to resolution funds and deposit guarantee systems

Headings	2020	2021
FGDL contribution	12.932.810	20.780.741
FRL contribution	17.151.220	21.351.826
Total	**30.084.030**	**42.132.567**

5.13 Depreciation allowances for tangible assets

- **Depreciation expense**

Headings	2020	2021
Depreciation expense - buildings	11.673.733	11.834.152
Depreciation expense - equipment and furniture	10.002.273	10.421.864
Depreciation expense - right-of-use assets in relation to leases	2.898.142	2.757.105
Depreciation expense for tangible assets	**24.574.148**	**25.013.121**

- **Impairment**

No impairment of tangible assets according to IAS 36 was recognised by the Group in 2020 or 2021.

5.14 Allowances for impairment of investment properties

- **Depreciation expense**

Headings	2020	2021
Depreciation expense	897.738	798.615
Depreciation expense for investment property	**897.738**	**798.615**

- **Impairment**

No impairment of investment properties according to IAS 36 was recognised by the Group in 2020 or 2021.

5.15 Allowances for impairment of intangible assets

- **Depreciation expense**

Headings	2020	2021
Depreciation expense	17.059.000	20.681.257
Depreciation expense for intangible assets	**17.059.000**	**20.681.257**

- **Impairment**

No impairment of intangible assets according to IAS 36 was recognised by the Group in 2020 or 2021.

5.16 Net allowances for impairment of credit risks

	2020			2021		
	Additions	Reversals	Total	Additions	Reversals	Total
Fixed-income securities recognised at amortised cost	-14.492.265	2.728.317	-11.763.948	-1.848.585	13.782.738	11.934.152
Fixed-income securities recognised at fair value through the revaluation reserve	-2.,285	-	-2.285	-	744	744
Loans and advances	-66.311.088	50.619.916	-15.691.172	-40.152.983	52.503.885	12.350.902
Total	**-80.805.638**	**53.348.233**	**-27.457.405**	**-42.001.568**	**66.287.367**	**24.285.799**

	2020	2021
Interest on impaired loans and advances	3.353.591	3.058.657
Total	**3.353.591**	**3.058.657**

5.17 Provisions

Headings	2020	2021
Provisions	-26.538.694	-15.077.004
Reversal of provisions	6.769.860	22.069.860
Total	**-19.768.834**	**6.992.856**

5.18 Tax expense

Headings	2020	2021
Tax on income from continuing operations	-30.971.361	-57.892.450
Deferred taxes	-362.396	4.503.574
Tax on profit/(loss) for the period	**-31.333.757**	**-53.388.876**

The nominal tax rate applicable in Luxembourg was 24,94% as at 31 December 2021 and 31 December 2020. The Group's effective tax rate was 13,8% in 2021 and 15,3% in the prior year, 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:

	2020	2021
Income before tax	205.245.329	384.557.558
Tax rate	24,94%	24,94%
Theoretical tax at the standard rate	51.188.185	95.908.655
Tax impact of non-deductible expenses	116.852	117.093
Tax impact of non-taxable income	-3.796.500	-5.580.660
Share in the income of equity-accounted associates	-11.425.885	-30.216.130
Tax rebates and reductions	-7.866.760	-12.171.042
Minority interests	-476.607	-527.538
IFRS 9 FTA impact	2.642.994	2.642.994
Other	951.479	3.215.504
Tax on profit/(loss) for the period	**31.333.758**	**53.388.876**

Figures for 2020 have been restated to facilitate a comparison with the new presentation for 2021.

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's effective tax rate would be 15,3% in 2021, versus 17,1% in 2020.

5.19 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 0,62% for financial year 2021 versus 0,34% in the prior year.

6 RISK MANAGEMENT[10]

6.1 General rules for managing 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

Pursuant to the Organic Law of 1989 and to legal obligations or obligations arising from applicable national or European regulations, the Board of Directors defines the Group’s parent company’s general policy and the main risk management policies, including the Risk Appetite Framework, proposed by the Group’s parent company’s Executive Committee. To do so, the Board considers the liquidity and solvency of the parent company as well as the medium- and long-term sustainability of the parent company’s business models.

In this context, the Board defines the overall strategy of the Group's parent company, on the basis of proposals from the Executive Committee, and oversees the implementation of the related objectives, as well as the administrative, functional and risk management structure resulting from implementation of the strategy. The ICAAP and ILAAP processes are incorporated into these oversight functions to evaluate the strategy and business development in terms of impacts on the Group’s parent company’s liquidity and solvency.

The various risks identified in the Group’s parent company’s risk mapping are subject to a materiality and likelihood of occurrence assessment, and a supervisory framework is developed to manage them.

[10] 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.

6.1.2 Role of the Audit and Compliance Committee

The Audit and Compliance Committee advises the Board of Directors in its supervisory mission and thus prepares the decisions to be adopted by the Board. In particular, it assists the Board in the areas of financial reporting, regulatory compliance, internal control including internal audit, and control exercised by the statutory auditor.

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

The Audit and Compliance Committee 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 Audit and Compliance Committee. The audit firm responsible for the statutory audit of the Group parent company's financial statements may be invited to Audit and Compliance Committee meetings at the request of the Audit and Compliance Committee.

6.1.3 Role of the Risk Committee

The Risk Committee advises the Board of Directors in its supervisory function and thus prepares 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 four 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 Committee.

6.1.4 Role of the Appointment and Compensation Committee

The Appointment and Compensation Committee advises the Board of Directors in its supervisory function and thus prepares the decisions to be adopted by the Board. It provides support on specific aspects relating to the appointment of members of the Board of Directors, the Bank's Executive Committee and those responsible for the Bank's internal control functions. The Committee advises the Board of Directors on its legal and regulatory obligations regarding the Bank's remuneration policies.

The Appointment and Compensation Committee consists of four members of the Board of Directors, including a majority of members considered independent within the meaning of the applicable laws and regulations.

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 Spuerkeess'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 done in keeping with the strategies and guiding principles established by the Board of Directors and applicable European and national laws and regulations. The Executive Committee thus makes concrete proposals to the Board of Directors to enable it to define the overall risk strategy, including the Group's risk appetite and risk management framework.

6.1.6 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 to the Executive Committee and operates independently from all commercial and operational activities within Spuerkeess. The Risk Management unit is therefore part of the second line of defence. The Chief Risk Officer may communicate directly and at his or her own initiative with the Chairman of the Audit and Compliance Committee, the Chairman of the Risk Committee and the Chairman of the Board of Directors.
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.

To fulfil its duties, the Risk Management function is tasked mainly with:

- Defining and updating the risk management policies and the Risk Appetite Framework;
- Identifying and assessing Spuerkeess's risks;
- Monitoring, from a macro perspective, changes in the quality of the credit risk of all of Spuerkeess's portfolios;
- Performing stress tests;
- Challenging the first line of defence by performing second-level controls, among others;
- Providing independent validation of the internal models;
- Monitoring and analysing operational incidents;
- Developing, monitoring and updating the Cyber Protection Plan;
- Overseeing Spuerkeess's IT security;
- Drafting opinions for new products and other strategic changes to help the management bodies in their decision-making;
- Implementing and using the ICAAP and ILAAP processes;
- Coordinating the work related to the recovery plan and the resolution plan.

6.1.7 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, together with Risk Management. It reports to the Executive Committee. The Chief Compliance Officer may communicate directly and at his or her own initiative with the Chairman of the Audit and Compliance Committee, the Chairman of the Risk Committee and the Chairman of the Board of Directors. The Compliance function operates independently from all commercial and operational activities within the Bank.

The areas and responsibilities of the Compliance function are mainly:

- anti-money laundering and counter-terrorist financing activities;
- 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 Spuerkeess is subject in the course of its activities.

In addition to the Compliance unit, 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.

6.1.8 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 Internal Audit function is the third line of defence and the Chief Internal Auditor is accountable to the Executive Committee and, ultimately, to the Board of Directors for the performance of his or her duties. The Chief Internal Auditor may communicate directly and at his or her own initiative with the Chairman of the Audit and Compliance Committee, the Chairman of the Risk Committee and the Chairman of the Board of Directors.

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 and Compliance Committee.

The Chief Internal Auditor (CIA) guarantees application of the international standards of the Institute of Internal Auditors and compliance with the regulatory requirements by the Internal Audit unit.

6.1.9 Responsibilities of the Loans and Credit department

From an organisational point of view, credit risk is managed by the Loans and Credit 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.

6.1.10 Systems for measuring and tracking limits

6.1.10.1 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 for all 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.

6.1.10.2 Market risk

Market risk is generally the risk of the Group's parent company 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 greatest market risks are those arising from the Group's parent company's business model and include interest rate risk and price risk on its strategic holdings. Section 6.4 provides information about market risk monitoring and management at the parent company.

6.1.10.3 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-2021, 74,1% of derivative financial instrument transaction outstandings 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-2021, 24,8% of outstanding amounts of derivative transactions were liquidated through these CCPs.

6.1.10.4 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. This monitoring includes 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 2021 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, Spuerkeess 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, Spuerkeess aims to continually have an immediately available minimum BCL liquidity reserve of EUR 3 billion. This reserve may consist of pledged securities and cash available with the BCL. The pledged securities component must represent at least EUR 2 billion at all times. On 31 December 2021, the amount of the liquidity reserve immediately available with the BCL was EUR 10,3 billion, of which EUR 8,3 billion in cash. At year-end 2021, the amount of the portfolio of assets eligible for refinancing with the BCL (excluding BCL cash) or usable on the interbank market exceeded EUR 9 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 originator or sponsor in such a transaction during the 2021 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 Operational risk

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 comes 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 parent company'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 collateral. 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.

Other than the changes implemented due to the Covid-19 pandemic-related health crisis, the Group's parent company did not change its credit risk management policy in the 2021 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 recognised 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 2021, 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 recognised at amortised cost" and "Financial assets mandatorily recognised 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 exposure to risk and volatility, systematically avoiding riskier segments of the market.

Maximum exposure to credit risk	31/12/2020	31/12/2021
Cash and sight accounts with central banks	7.128.135.655	9.773.732.257
Loans and advances at amortised cost – Credit institutions	1.833.195.892	1.346.631.751
Loans and advances at amortised cost – Customers	24.098.937.564	25.246.693.237
Financial instruments held for trading	138.717.034	235.242.636
Hedging derivative financial instruments	72.838.495	90.195.038
Financial assets mandatorily recognised at fair value through profit or loss	809.036.881	632.455.934
Fixed-income securities recognised at amortised cost	14.033.530.474	13.821.928.357
Fixed-income securities recognised at fair value through the revaluation reserve	18.042.494	17.534.901
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	373.811.797	156.504.244
Exposure of balance sheet commitments	**48.506.246.286**	**51.320.918.355**
Completion bonds	497.787.227	490.596.629
Letters of credit	81.374.447	92.675.362
Counter-guarantees	557.177.856	437.305.139
Other	16.759.254	29.262.164
Undrawn confirmed credits	6.473.177.679	6.544.953.090
Documentary credits	10.100.000	15.100.000
Exposure of off-balance sheet commitments	**7.636.376.463**	**7.609.892.384**
Total exposure	**56.142.622.748**	**58.930.810.739**

The Group uses the following standard techniques to mitigate credit and counterparty risk:

- collaterals:

Breakdown by type of collateral	31/12/2020	31/12/2021
Mortgages	17.983.571.491	19.703.718.877
Reverse repurchase agreements	939.438.787	358.393.324
Pledge through cash or securities deposits	52.154.377	72.653.758

- personal guarantees: these stood at EUR 565.668.522 at year-end 2021, compared with EUR 436.626.410 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:

31/12/2021	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	319.094.536		319.094.536	16.968.278	301.102.185	1.024.074
Derivatives	170.594.979	-	170.594.979	58.292.732	107.819.199	4.483.048
Total assets	**489.689.515**	**-**	**489.689.515**	**75.261.010**	**408.921.383**	**5.507.121**

31/12/2020	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	839.841.692	40.399.470	799.442.223	1.731.443	796.258.264	1.452.516
Derivatives	29.000.763	-	29.000.763	12.613.514	15.901.409	485.840
Total assets	**868.842.455**	**40.399.470**	**828.442.986**	**14.344.957**	**812.159.673**	**1.938.356**

Financial liabilities that are the subject of a legally enforceable netting framework agreement or a similar agreement:

31/12/2021	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	297.246.463	39.300.859	257.945.604	-	256.484.372	1.461.232
Derivatives	890.276.316	-	890.276.316	138.286.619	741.276.975	10.712.723
Total liabilities	**1.187.522.780**	**39.300.859**	**1.148.221.920**	**138.286.619**	**997.761.347**	**12.173.955**

31/12/2020	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	135.184.771	99.721.952	35.462.820	-	34.372.611	1.090.209
Derivatives	918.118.371	-	918.118.371	78.044.062	831.760.345	8.313.964
Total liabilities	**1.053.303.142**	**99.721.952**	**953.581.191**	**78.044.062**	**866.132.956**	**9.404.173**

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 31.12.2021 (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	9.146.402	501.416	109.136	5.878	70	10.829	9.773.732
Loans and advances at amortised cost	26.183.947	122.374	13.635	259.951	41	13.377	26.593.325
Financial instruments held for trading and hedging derivative instruments	256.157	60.122	8.645	506	-	8	325.438
Financial assets mandatorily recognised at fair value through profit or loss	482.284	19.944	86.601	-	43.624	2	632.456
Fixed-income securities recognised at amortised cost	7.790.252	1.493.891	2.442.025	1.150.611	747.128	198.022	13.821.928
Financial instruments recognised at fair value through the revaluation reserve	1.142.581	-	-	-	-	-	1.142.581
Investments in associates accounted for using the equity method	571.515	-	-	-	-	-	571.515
Other	563.889	-	-	-	-	-	563.889
Total	**46.137.029**	**2.197.747**	**2.660.043**	**1.416.946**	**790.863**	**222.237**	**53.424.865**

Geographical area as at 31.12.2020 (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	6.976.717	156	138.463	2.809	-	9.991	7.128.136
Loans and advances at amortised cost	25.671.786	15.571	14.449	219.996	43	10.289	25.932.133
Financial instruments held for trading and hedging derivative instruments	192.925	-	16.680	1.880	-	70	211.556
Financial assets mandatorily recognised at fair value through profit or loss	588.968	-	134.015	-	36.029	50.025	809.037
Fixed-income securities recognised at amortised cost	9.109.110	592.903	2.487.103	992.079	744.797	107.539	14.033.530
Variable-income securities recognised at fair value through the revaluation reserve	876.807	-	-	-	-	-	876.807
Investments in associates accounted for using the equity method	449.059	-	-	-	-	-	449.059
Other	791.103	-	-	-	-	-	791.103
Total	**44.656.474**	**608.630**	**2.790.710**	**1.216.763**	**780.868**	**177.914**	**50.231.360**

In the following table, to meet the requirements of IFRS 7 "Financial Instruments: Disclosures", exposure to credit risk as at 31 December 2020 and 2021 is presented according to internal ratings.

The average collateralisation ratio recorded is defined as the ratio of collateral received to outstanding amounts.

Exposure by counterparty category and risk class:

	2020			2021		
	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	5.903.586.863	5.902.868.849	-	8.902.828.409	8.902.532.192	-
Standard grade	1.227.766.443	1.225.266.176	-	872.064.879	871.200.063	-
Sub-standard grade	635	631	-			-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Total of categories	**7.131.353.941**	**7.128.135.655**		**9.774.893.289**	**9.773.732.255**	
Loans and advances at amortised cost						
Banks						
High grade	676.577.220	676.083.138	31,02%	699.658.902	699.455.813	11,44%
Standard grade	1.138.116.906	1.137.004.143	44,66%	614.710.655	614.372.564	45,32%
Sub-standard grade	1.080	1.037	-	3.350	3.304	-
Past due not in default	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	20.107.573	20.107.573	-	32.800.072	32.800.072	-
Corporates						
High grade	2.082.756.214	2.069.478.526	50,21%	2.464.830.827	2.456.141.250	60,49%
Standard grade	1.890.871.021	1.883.842.295	45,09%	1.850.910.749	1.845.083.572	41,20%
Sub-standard grade	1.328.926.599	1.293.225.246	48,96%	1.316.206.384	1.289.344.519	45,90%
Past due not in default	25.648.383	25.002.820	59,40%	37.608.858	37.208.065	88,13%
Default	190.089.368	151.294.408	94,18%	156.983.538	118.762.156	89,46%
Not rated	346.133.685	344.759.287	70,24%	44.705.028	44.589.580	0,00%
Sovereigns						
High grade	1.611.759.785	1.611.647.972	0,08%	1.217.008.198	1.216.949.950	0,07%
Standard grade	5.925.417	5.903.163	-	5.682.171	5.667.575	-
Sub-standard grade	6.925	6.783	-	100	99	-
Past due not in default	8.554.513	8.553.925	-	1.469.987	1.469.915	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Retail						
High grade	13.710.427.225	13.709.054.930	92,12%	15.088.807.493	15.086.673.181	92,60%
Standard grade	1.714.160.691	1.712.397.162	91,21%	1.783.952.686	1.781.291.381	90,69%
Sub-standard grade	1.160.753.419	1.148.917.526	89,74%	1.270.019.626	1.253.360.402	89,99%
Past due not in default	40.403.698	40.049.110	84,45%	35.552.441	35.200.266	78,97%
Default	91.685.678	80.404.368	80,58%	85.578.213	74.951.327	77,47%
Not rated	14.400.043	14.400.043	100,00%	-	-	-
Total of categories	**26.057.305.445**	**25.932.133.455**		**26.706.489.279**	**26.593.324.989**	

	2020			2021		
	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	64.059.970	64.059.970	10,80%	85.394.739	85.394.739	35,32%
Standard grade	117.602.445	117.602.445	26,35%	209.554.395	209.554.395	36,04%
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Corporates						
High grade	247.228	247.228	-	20.849	20.849	100,00%
Standard grade	15.639.986	15.639.986	-	8.026.182	8.026.182	6,73%
Sub-standard grade	8.042.352	8.042.352	-	11.842.150	11.842.150	-
Default	-	-	-	-	-	-
Not rated	5.102.293	5.102.293	15,48%	10.085.109	10.085.109	67,65%
Sovereigns						
High grade	-	-	-	-	-	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Retail						
High grade	650.771	650.771	-	12.368	12.368	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	108.228	108.228	-	445.344	445.344	-
Default	-	-	-	56.536	56.536	-
Not rated	102.254	102.254	-	-	-	-
Total of categories	**211.555.529**	**211.555.529**		**325.437.673**	**325.437.673**	
Financial assets mandatorily recognised at fair value through profit or loss						
Banks						
High grade	226.819.044	226.819.044	-	85.373.861	85.373.861	-
Standard grade	250.842.439	250.842.439	-	155.556.607	155.556.607	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated			-	-	-	-
Corporates						
High grade	36.217.066	36.217.066	-	104.259.670	104.259.670	-
Standard grade	134.051.257	134.051.257		113.634.140	113.634.140	-
Sub-standard grade	4.404.079	4.404.079		18.984.777	18.984.777	-
Default	1.296.426	1.296.426	-	4.457.562	4.457.562	-
Not rated	3.487.254	3.487.254		749.335	749.335	-
Sovereigns						
High grade	151.913.360	151.913.360	-	149.435.149	149.435.149	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Securitisation						
High grade	-	-	-	-	-	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	2.672	2.672	-
Default	5.955	5.955	-	2.160	2.160	-
Not rated	-	-	-	-	-	-
Total of categories	**809.036.882**	**809.036.882**		**632.455.934**	**632.455.934**	

	2020			2021		
	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio
Fixed-income securities recognised at amortised cost						
Banks						
High grade	4.611.511.552	4.606.525.432	-	3.918.614.572	3.916.808.796	-
Standard grade	1.847.262.539	1.842.182.941	-	2.002.898.730	2.000.484.776	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Corporates						
High grade	1.296.309.604	1.295.164.281	-	1.617.695.818	1.617.142.744	-
Standard grade	3.243.169.060	3.236.271.551	-	3.229.546.406	3.227.098.718	-
Sub-standard grade	37.060.229	36.037.992	-	41.748.415	41.239.207	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Sovereigns						
High grade	2.374.253.930	2.373.676.216	-	2.368.659.947	2.368.276.809	-
Standard grade	572.147.552	571.648.391	-	600.589.725	600.212.179	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Securitisation						
High grade	54.982.423	54.544.785	-	42.384.717	42.047.352	-
Standard grade	17.619.125	17.478.884	-	8.686.923	8.617.778	-
Sub-standard grade	-	-	-	203.296	-	-
Default	203.310	-	-		-	-
Not rated	-	-	-	-	-	-
Total of categories	**14.054.519.322**	**14.033.530.474**		**13.831.028.548**	**13.821.928.358**	

	2020			2021		
	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding including impairment	Average collateralisation ratio
Financial instruments recognised at fair value through the revaluation reserve and investments in associates accounted fo						
Banks						
High grade	4.018.037	4.018.037	-	6.502.040	6.502.040	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Corporates						
High grade	57.052.161	57.052.161	-	53.720.899	53.720.899	-
Standard grade	720.849.396	720.849.396	-	1.376.137.159	1.376.137.159	-
Sub-standard grade	520.612.516	520.612.516	-	260.201.345	260.201.345	-
Default	-	-	-	-	-	-
Not rated	5.291.008	5.291.008	-	-	-	-
Sovereigns						
High grade	18.042.494	18.042.494	-	17.534.900	17.534.900	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Total of categories	**1.325.865.611**	**1.325.865.611**		**1.714.096.344**	**1.714.096.344**	
Other (*)	791.102.674	791.102.674	-	563.889.445	563.889.445	-
Total of categories	**791.102.674**	**791.102.674**		**563.889.445**	**563.889.445**	
Total	**50.380.739.405**	**50.231.360.280**		**53.548.290.512**	**53.424.864.998**	

(*) The "Other" 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", "Current taxes", "Deferred taxes" and "Other assets".

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 "Fixed-income securities recognised at amortised cost", the Group does not record any items in the "Past due not in default" line and uses objective evidence of impairment 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 Standard & Poor's (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

The purpose of risk management is to ensure that the risk incurred matches the Bank's risk appetite. To that end, the parent company has introduced several market risk indicators subject to limits that reflect risk appetite.

The Financial Markets department and, more specifically, the Financial Markets (FIM) and Asset and Liability Management (ALM) units are responsible for operational management of market risks. First-level controls are carried out by the Support, Reporting and Financial Valuation (SRF) unit, which was created in 2020 and is part of the Financial Markets department.

This unit verifies compliance with a number of procedures and limits relating to the activities of each trading floor desk (open positions, counterparty risk, money-market limits, etc.). Automated control reports have been developed to that end, and their results are archived and communicated to management every night.

The ALM and Money Market units take note of these reports, along with the reports they can access independently. If a limit is exceeded, these two units provide an explanation of the situation, take appropriate management actions or suggest a change in the limit framework.

For ALM, whenever thresholds are exceeded or management actions are taken, the details are included in the monthly ALM report.

Second-line controls are carried out by the Risk Management function (RIM), which monitors every instance of a threshold being exceeded through the Risk Working Group, the Executive Committee and the Risk Committee.

6.4.1 Interest rate risk

Spuerkeess takes a day-to-day integrated approach to managing interest rate risk for its entire banking book. This integrated approach can also be broken down into the money-market and ALM scopes. The money-market scope covers the trading floor positions with an initial rate term of less than two years, while the ALM scope covers all other positions sensitive to interest rate risk. This new tool gives the Bank a more accurate view of the nature of its interest rate risk and provides a breakdown of its various components, namely:

- maturity transformation risk;
- options risk (automatic options such as caps/floors, and behavioural options such as early repayments and outflows of liabilities with no maturity).

The indicators produced by the tool to analyse interest rate risk sensitivity are as follows:

- rate schedule grouped according to different time buckets;

- the impact of different rate scenarios on the economic value of the banking book positions sensitive to interest rate risk (delta EVE);
- the impact of different rate scenarios on net interest margin (delta NII).

Delta EVE, for standard stress tests, i.e., a 200-basis-point increase, is as follows:

date	Scope	Scenario	Delta EVE	Delta EVE/Equity
31/12/2021	Entire banking book excluding equity	+200 bp	-251.550.304	-5,37%
31/12/2020	Entire banking book excluding equity	+200 bp	-278.485.304	-6,40%

6.4.2 Price risk on variable-income securities

The VaR method remained in effect in 2021 to manage the liquid portion of the Group's parent company's equity portfolio, while observing the corresponding limit.

6.4.3 Foreign exchange risk

The parent company's foreign exchange risk is very low. It is subject to open position limits by foreign currency group.
In addition to open position limits, foreign exchange risk is subject to a VaR limit.

6.4.4 Analysis of the fair 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 as at 31/12/2021	Carrying amount	Fair value	Unrealised valuation	Level 1	Level 2	Level 3
Financial assets						
Cash and sight accounts with central banks	9.773.732.257	9.773.732.257	-	-	-	-
Loans and advances at amortised cost	26.593.324.988	26.740.784.991	147.460.003	-	100,00%	-
of which measured at fair value for hedging purposes	*1.196.048.047*	*1.196.048.047*	-	-	-	-
Financial instruments held for trading	235.242.636	235.242.636	-	-	-	-
Hedging derivative financial instruments	90.195.038	90.195.038	-	-	-	-
Financial assets mandatorily recognised at fair value through profit or loss	632.455.934	632.455.934	-	-	-	-
Fixed-income securities recognised at amortised cost	13.821.928.357	13.856.974.974	35.046.617	79,55%	20,45%	-
Fixed-income securities recognised at fair value through the revaluation reserve	17.534.901	17.534.901	-	-	-	-
Variable-income securities recognised at fair value through the revaluation reserve	1.125.045.988	1.125.045.988	-	-	-	-
Investments in associates accounted for using the equity method	571.515.457	571.515.457	-	-	-	-
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	156.504.244	156.504.244	-	-	-	-
TOTAL	**53.017.479.800**	**53.199.986.420**	**182.506.620**			
Financial liabilities						
Deposits at amortised cost	43.841.342.694	43.947.987.600	106.644.906	-	100,00%	-
Financial instruments held for trading	129.935.940	129.935.940	-	-	-	-
Hedging derivative financial instruments	827.678.271	827.678.271	-	-	-	-
Financial liabilities designated at fair value through profit or loss	165.001.798	165.001.798	-	-	-	-
Debt securities in issue	2.793.469.938	2.792.741.929	-728.009	-	100,.00%	-
of which measured at fair value for hedging purposes	*412.901.778*	*412.901.778*	-	-	-	-
TOTAL	**47.757.428.641**	**47.863.345.538**	**105.916.897**			

Categories on 31/12/2020	Carrying amount	Fair value	Unrealised valuation	Level 1	Level 2	Level 3
Financial assets						
Cash and sight accounts with central banks	7.128.135.655	7.128.135.655	-	-	-	-
Loans and advances at amortised cost	25.932.133.456	26.750.622.184	818.488.728	-	100,00%	-
of which measured at fair value for hedging purposes	*1.291.588.076*	*1.291.588.076*	-	-	-	-
Financial instruments held for trading	138.717.034	138.717.034	-	-	-	-
Hedging derivative financial instruments	72.838.495	72.838.495	-	-	-	-
Financial assets mandatorily recognised at fair value through profit or loss	809.036.881	809.036.881	-	-	-	-
Fixed-income securities recognised at amortised cost	14.033.530.474	14.103.864.931	70.334.458	80,10%	19,80%	0,10%
Fixed-income securities recognised at fair value through the revaluation reserve	18.042.494	18.042.494	-	-	-	-
Variable-income securities recognised at fair value through the revaluation reserve	858.764.091	858.764.091	-	-	-	-
Investments in associates accounted for using the equity method	449.059.026	449.059.026	-	-	-	-
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	373.811.797	373.811.797	-	-	-	-
TOTAL	**49.814.069.403**	**50.702.892.589**	**888.823.185**			
Financial liabilities						
Deposits at amortised cost	40.559.932.834	40.994.311.892	434.379.058	-	100,00%	-
Financial instruments held for trading	366.643.744	366.643.744	-	-	-	-
Hedging derivative financial instruments	1.112.075.207	1.112.075.207	-	-	-	-
Financial liabilities designated at fair value through profit or loss	172.175.873	172.175.873	-	-	-	-
Debt securities in issue	2.959.242.843	2.959.371.665	128.822	-	100,00%	-
of which measured at fair value for hedging purposes	*368.125.966*	*368.125.966*	-	-	-	-
TOTAL	**45.170.070.501**	**45.604.578.381**	**434.507.880**			

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 recognised 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, 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 recognised at amortised cost are bonds quoted on a market.

The Group calculates the fair value of financial assets and liabilities 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 financial assets and liabilities at fair value

Financial assets and liabilities at fair value:

Categories as at 31 December 2021	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading	**-**	**235.242.633**	**-**	**235.242.633**
- Debt instruments	-	-	-	-
- Equity instruments	-	-	-	-
- Derivative financial instruments	-	235.242.633	-	235.242.633
- IRS	-	*56.070.831*	-	*56.070.831*
- CIRS/outright	-	*179.171.801*	-	*179.171.801*
- other	-	-	-	-
Hedging derivative financial instruments	**-**	**90.195.040**	**-**	**90.195.040**
- IRS	-	*63.639.141*	-	*63.639.141*
- CIRS	-	*26.555.899*	-	*26.555.899*
Financial assets mandatorily recognised at fair value through profit or loss	**-**	**632.449.813**	**6.121**	**632.455.934**
- Debt instruments	-	602.788.491	6.121	602.794.612
- Public sector	-	*149.435.149*	-	*149.435.149*
- Credit institutions	-	*240.930.468*	-	*240.930.468*
- Corporate customers		*212.422.874*	*6.121*	*212.428.995*
- Other financial instruments	-	29.661.322	-	29.661.322
- Corporate customers	-	*29.661.322*	-	*29.661.322*
Variable-income securities recognised at fair value through the revaluation reserve	**33.395.284**	**135.233.874**	**956.416.829**	**1.125.045.987**
- Public sector	-	-	-	-
- Credit institutions	-	-	*6.502.040*	*6.502.040*
- Corporate customers	*33.395.284*	*135.233.874*	*949.914.789*	*1.118.543.947*
Fixed-income securities recognised at fair value through the revaluation reserve	**17.534.900**	**-**	**-**	**17.534.900**
- Credit institutions	-	-	-	-
- Public sector	*17.534.900*	-	-	*17.534.900*
TOTAL	**50.930.184**	**1.093.121.360**	**956.422.950**	**2.100.474.494**
Financial liabilities				
Derivative financial instruments held for trading	**-**	**129.935.939**	**-**	**129.935.939**
- IRS	-	*57.211.750*	-	*57.211.750*
- CIRS/outright	-	*72.393.846*	-	*72.393.846*
- other	-	*330.343*	-	*330.343*
Hedging derivative financial instruments	**-**	**827.678.270**	**-**	**827.678.270**
- IRS	-	*586.498.376*	-	*586.498.376*
- CIRS	-	*241.179.894*	-	*241.179.894*
Financial liabilities designated at fair value through profit or loss	**-**	**165.001.798**	**-**	**165.001.798**
TOTAL	**-**	**1.122.616.007**	**-**	**1.122.616.007**

Categories on 31 December 2020	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading	**-**	**138.717.034**	**-**	**138.717.034**
- Debt instruments	-	-	-	-
- Equity instruments	-	-	-	-
- Derivative financial instruments	-	138.717.034	-	138.717.034
- IRS	-	*75.804.806*	-	*75.804.806*
- CIRS/outright	-	*61.169.505*	-	*61.169.505*
- other	-	*1.742.723*	-	*1.742.723*
Hedging derivative financial instruments	**-**	**72.838.495**	**-**	**72.838.495**
- IRS	-	*28.512.027*	-	*28.512.027*
- CIRS	-	*44.326.468*	-	*44.326.468*
Financial assets mandatorily recognised at fair value through profit or loss	**-**	**809.029.562**	**7.320**	**809.036.882**
- Debt instruments	-	790.386.664	7.320	790.393.984
- Public sector	-	*151.913.360*	-	*151.913.360*
- Credit institutions	-	*477.661.483*	-	*477.661.483*
- Corporate customers		*160.811.820*	*7.320*	*160.819.141*
- Other financial instruments	-	18.642.898	-	18.642.898
- Corporate customers	-	*18.642.898*	-	*18.642.898*
Variable-income securities recognised at fair value through the revaluation reserve	**46.463.330**	**154.499.982**	**657.800.780**	**858.764.091**
- Public sector	-	-	-	-
- Credit institutions	-	-	*4.018.037*	*4.018.037*
- Corporate customers	*46.463.330*	*154.499.982*	*653.782.743*	*854.746.054*
Fixed-income securities recognised at fair value through the revaluation reserve	**18.042.494**	**-**	**-**	**18.042.494**
- Credit institutions	-	-	-	-
- Public sector	*18.042.494*	-	-	*18.042.494*
Non-current assets and disposal groups classified as held for sale	**-**	**-**	**-**	**-**
- Corporate	-	-	-	-
TOTAL	**64.505.823**	**1.175.085.072**	**657.808.100**	**1.897.398.996**
Financial liabilities				
Derivative financial instruments held for trading	**-**	**366.643.742**	**-**	**366.643.742**
- IRS	-	*77.772.031*	-	*77.772.031*
- CIRS/outright	-	*286.798.005*	-	*286.798.005*
- other	-	*2.073.706*	-	*2.073.706*
Hedging derivative financial instruments	**-**	**1.112.075.207**	**-**	**1.112.075.207**
- IRS	-	*945.827.926*	-	*945.827.926*
- CIRS	-	*166.247.281*	-	*166.247.281*
Financial liabilities designated at fair value through profit or loss	**-**	**172.175.873**	**-**	**172.175.873**
TOTAL	**-**	**1.650.894.822**	**-**	**1.650.894.822**

Changes in outstanding financial assets from one year to the next stem primarily from the change in the valuation prices of variable-income and fixed-income securities with, however, an exception for financial assets mandatorily recognised at fair value through profit or loss where the carrying amount at Level 2 decreases significantly due to the non-replacement of positions that have matured.

A comparison of the breakdown of financial assets by level at end-2021 shows that 2,4% (3,4% in 2020) of financial assets are classified as Level 1, 52,0% (61,9% in 2020) as Level 2 and 45,5% (34,7% in 2020) as Level 3.

Spuerkeess 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 fair value of Level 3 positions.
All the financial instruments in the liability categories continue to be at Level 2.

Level 3 breakdown:

	Financial assets mandatorily recognised at fair value through profit or loss		Variable-income securities recognised at fair value through the revaluation reserve	Total financial assets
	Debt instruments	Equity instruments		
Total as at 1 January 2021	**7.320**	-	**657.800.780**	**657.808.100**
Total gains / losses	1.486.640	-	370.270.910	**371.757.550**
- Income statement	*1.486.640*	-	-	***1.486.640***
- Revaluation reserve	-	-	*370.270.910*	***370.270.910***
Purchases	-	-	2.672.958	**2.672.958**
Reimbursements/sales	-1.854.402	-	-78.046.851	**-79.901.253**
Reclassification	-	-	-	-
Other changes	366.564	-	3.719.031	**4.085.595**
Transfers from Level 1 to Level 3	-	-	-	-
Transfers from Level 2 to Level 3	-	-	-	-
Transfers from Level 3	-	-	-	-
Total as at 31 December 2021	**6.122**	-	**956.416.828**	**956.422.950**
Total gains/losses for the period included in the income statement for financial assets and liabilities held as at 31 December 2021	40.464	-	10.234.766	**10.275.230**

	Financial assets mandatorily recognised at fair value through profit or loss		Variable-income securities recognised at fair value through the revaluation reserve	Total financial assets
	Debt instruments	Equity instruments		
Total as at 1 January 2020	**19.481**	-	**420.525.993**	**420.545.475**
Total gains / losses	1.660.905	-	241.505.428	**243.166.333**
- Income statement	*1.660.905*	-	-	***1.660.905***
- Revaluation reserve	-	-	*241.505.428*	***241.505.428***
Purchases	-	-	-	-
Reimbursements/sales	-1.171.773	-	-27.572	**-1.199.345**
Other changes	-501.296	-	-4.203.069	**-4.704.365**
Transfers from Level 1 to Level 3	-	-	-	-
Transfers from Level 2 to Level 3	-	-	-	-
Transfers from Level 3	-	-	-	-
Total as at 31 December 2020	**7.320**	-	**657.800.780**	**657.808.100**
Total gains/losses for the period included in the income statement for financial assets and liabilities held as at 31 December 2020	113.160	-	3.013.500	**3.126.660**

For financial year 2021, the increase in Level 3 stemmed solely from the fair value measurements applied to variable-income securities recognised at fair value through the revaluation reserve.

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:

Given the small amount recognised for debt instruments, the Group's parent company does not provide a sensitivity analysis for Level 3 for financial years 2021 and 2020.

For equity instruments, the Group's parent company has performed a sensitivity analysis using the following methods:

- 10% decrease or increase in EBITDA, with a simulation of the impact on net income and on liquid funds on the assets side of companies' balance sheets;
- Decrease or increase in profit of 10% of the carrying amount;
- 10% decrease or increase in real estate prices in Luxembourg.

The fair value sensitivity for Level 3 instruments is therefore quantified as follows:

31/12/2021	Level 3 fair value	Impact on fair value	
		10% decrease depending on the methodology used	10% increase depending on the methodology used
Variable-income securities recognised at fair value through the revaluation reserve	874.734.187	-96.971.157	96.990.656

31/12/2020	Level 3 fair value	Impact on fair value	
		10% decrease depending on the methodology used	10% increase depending on the methodology used
Variable-income securities recognised at fair value through the revaluation reserve	550.625.130	-73.993.942	72.199.179

The sensitivity analysis was performed on the two largest shareholdings.

6.4.5 Analysis of foreign exchange risk: Net currency positions

As at 31/12/2021	Net balance sheet position
JPY	-5.377.823
USD	6.481.162
XAU	-2.259.127
Other	5.316.915
Total	**4.161.127**

At 31/12/2020	Net balance sheet position
CHF	2.809.723
JPY	-2.722.438
USD	10.767.361
Other	-771,34
Total	**10.083.306**

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 2021
Issuance of securities*	1.056.375.742	1.331.449.616	**2.387.825.359**	116.168.451	478.385.232	**594.553.683**	**2.982.379.042**
Deposits at amortised cost -							
Credit institutions	2.863.844.797	586.300.254	**3.450.145.051**	3.427.651.467	45.038.899	**3.472.690.366**	**6.922.835.417**
Customers	33.299.103.732	2.056.704.726	**35.355.808.458**	675.777.873	897.243.416	**1.573.021.289**	**36.928.829.747**
Liabilities arising from leases	708.065	2.064.686	**2.772.751**	6.097.026	516.646	**6.613.672**	**9.386.424**
Total	**37.220.032.336**	**3.976.519.284**	**41.196.551.619**	**4.225.694.817**	**1.421.184.193**	**5.646.879.010**	**46.843.430.629**

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2020
Issuance of securities*	1.370.193.462	1.204.491.592	**2.574.685.054**	129.586.918	475.209.538	**604.796.456**	**3.179.481.510**
Deposits at amortised cost -							
Credit institutions	2.005.526.658	402.278.716	**2.407.805.374**	3.490.681.921	54.211.677	**3.544.893.598**	**5.952.698.972**
Customers	31.789.112.269	1.130.522.879	**32.919.635.148**	979.313.443	713.483.203	**1.692.796.646**	**34.612.431.794**
Liabilities arising from leases	750.551	2.251.654	**3.002.205**	6.632.089	1.597.884	**8.229.973**	**11.232.177**
Total	**35.165.582.940**	**2.739.544.841**	**37.905.127.781**	**4.606.214.371**	**1.244.502.302**	**5.850.716.673**	**43.755.844.453**

* including financial liabilities designated at fair value through profit or loss

Table showing balance sheet liabilities 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 2021
Issuance of debt securities	1.123.011.652	1.259.184.064	**2.382.195.716**	136.862.701	500.690.633	**637.553.334**	**3.019.749.050**
Deposits at amortised cost -							
Credit institutions	3.421.107.924	55.127.866	**3.476.235.790**	3.468.329.197	625.622	**3.468.954.819**	**6.945.190.609**
Customers	13.846.244.112	3.026.837.176	**16.873.081.287**	10.083.747.688	10.258.273.609	**20.342.021.297**	**37.215.102.584**
Total	**18.390.363.688**	**4.341.149.105**	**22.731.512.793**	**13.688.939.586**	**10.759.589.864**	**24.448.529.450**	**47.180.042.243**

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2020
Issuance of debt securities	1.496.349.041	1.081.964.163	**2.578.313.204**	121.601.920	269.005.817	**390.607.738**	**2.968.920.942**
Deposits at amortised cost -							
Credit institutions	2.523.955.506	52.143.646	**2.576.099.152**	3.212.224.176	12.232.644	**3.224.456.820**	**5.800.555.972**
Customers	12.099.245.081	5.161.513.630	**17.260.758.711**	10.165.022.185	7.208.784.584	**17.373.806.769**	**34.634.565.480**
Total	**16.119.549.628**	**6.295.621.439**	**22.415.171.067**	**13.498.848.281**	**7.490.023.045**	**20.988.871.326**	**43.404.042.393**

6.5.2 Schedule of derivative financial instruments

Tables 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 2021 and 31 December 2020.

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2021
Derivative financial instruments held for trading					
Foreign exchange swaps and forward exchange contracts					
Inflows	12.059.324.195	2.798.801.270	196.430.481	4.626.648	15.059.182.594
Outflows	-12.001.553.452	-2.736.011.166	-203.040.737	-3.515.009	-14.944.120.363
Derivative financial instruments used for hedging purposes					
CCIS					
Inflows	69.694.031	240.122.594	1.138.009.957	916.298.817	2.364.125.398
Outflows	-84.990.453	-287.929.097	-1.330.588.643	-987.451.160	-2.690.959.353
Total inflows	**12.129.018.226**	**3.038.923.864**	**1.334.440.438**	**920.925.465**	**17.423.307.993**
Total outflows	**-12.086.543.905**	**-3.023.940.262**	**-1.533.629.380**	**-990.966.169**	**-17.635.079.716**

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2020
Derivative financial instruments held for trading					
Foreign exchange swaps and forward exchange contracts					
Inflows	10.887.736.164	3.488.741.419	213.556.011	3.948.511	14.593.982.105
Outflows	-11.042.146.689	-3.552.744.000	-213.121.642	-3.497.839	-14.811.510.170
Derivative financial instruments used for hedging purposes					
CCIS					
Inflows	45.857.240	331.871.627	961.638.026	897.541.527	2.236.908.420
Outflows	-60.109.247	-370.720.729	-1.078.275.273	-908.147.670	-2.417.252.919
Total inflows	**10.933.593.404**	**3.820.613.046**	**1.175.194.037**	**901.490.038**	**16.830.890.525**
Total outflows	**-11.102.255.936**	**-3.923.464.729**	**-1.291.396.915**	**-911.645.509**	**-17.228.763.089**

Tables 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 2021
Derivative financial instruments held for trading					
IRS	-2.465.681	5.236.030	-3.045.932	-25.201.292	-25.476.875
Derivative financial instruments used for hedging purposes					
IRS	44.783.922	102.067.852	422.341.988	385.107.434	954.301.197
Total outflows	**42.318.242**	**107.303.882**	**419.296.056**	**359.906.143**	**928.824.322**

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2020
Derivative financial instruments held for trading					
IRS	-2.539.546	4.660.619	382.045	-27.163.325	-24.660.207
Derivative financial instruments used for hedging purposes					
IRS	49.193.734	104.619.216	461.005.610	423.513.113	1.038.331.673
Total outflows	**46.654.188**	**109.279.835**	**461.387.655**	**396.349.788**	**1.013.671.466**

6.6 Economic capital

As part of the ICAAP process, under Basel III Pillar 2, the Group measures economic risk and decides how to allocate its capital resources to the various business lines.

This process and associated work are formally drawn up and reported to the European Central Bank. CSSF Circular 20/753 (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.

As part of the ICAAP process, the various risks to which the Group is exposed are identified and assessed. This includes risks under Pillar 1 of the Basel accords, such as credit, market, and operational risks, and risks under Pillar 2. Identification is based on an ongoing risk assessment and recognition process.

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 latter may result in an increase in capital requirements or have an impact on economic capital.

The Group's parent company's capital management policy meets the objectives of the missions defined in its organic law, including the mission to finance Luxembourg's economy to support its development. 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 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 in a normative approach and an economic approach;
- allocation of surplus capital according to the Group's strategic guidelines.

In terms of internal governance, the 2021 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.

7 SEGMENT REPORTING

7.1 The Group's operations

The Group's activities are carried out from the territory of the Grand Duchy of Luxembourg and are broken down into three major segments, each with comparable profitability and risk characteristics. The bank also owns stakes in companies in Luxembourg, which are included in a separate segment. The segments defined in this way are managed separately and are grouped into specific structures in the Group's organisational chart:

- Retail, Professional, Corporate and Public Sector Banking: this segment consists of the branch network with the deposit, lending, advisory and transaction-related activities for retail customers and professional customers, as well as the management services intended for private customers. These products and services are sold through the branch network, by Spuerkeess Direct, by dedicated advisors at the Bank's head office and through the digital channels that serve its customers. From an organisational point of view, these activities fall within the remit of the Private Banking department. The Corporate Banking department manages the relationships with corporate customers and public sector actors. Its loans and credit, leasing and other financial advice services are provided by specialised teams located in Luxembourg.

- Financial Markets and Institutional Clients: this segment comprises the activities relating to Treasury, the Bank's investment portfolio management, Asset and Liability Management, Customer Desk, institutional client monitoring and mutual fund administration and management. From an organisational point of view, these activities fall within the remit of the Financial Markets and Institutional Clients departments.

- Other: this segment consists of income from investments and all the back-office operating activities that provide services to the Private Banking, Corporate Banking, Financial Markets and Institutional Clients segments, as well as the support functions and, lastly, reconciliation differences. The support functions include, among others, IT, finance, and secretary general, as well as control functions such as audit, compliance and risk management which oversee the activities of all of Spuerkeess's segments.

7.2 Allocation rules and net bank margin

The sector reporting is produced from analytical balance sheet allocation rules, a transfer pricing system and general expense allocation methods.

The transfer pricing system reflects the transfer of interest rate risk which is assumed by the Bank's Asset and Liability Management entity. This entity is responsible for interest rate risk management and for asset/liability management for the entire Bank.

Back-office department and support activity costs are rebilled to the different segments using an analytical cost allocation mechanism that reflects the economic consumption of the products and services provided to these segments.

The Group's net bank margin (NBM) is broken down into these main products:

- deposits from private customers, business customers, corporates, the public sector and institutional clients;
- loans and advances to private customers, business customers, corporates, the public sector and institutional clients;
- other products for private customers, business customers, corporates, the public sector and institutional clients;
- other products.

Neither one individual customer nor any consolidated group of customers generates more than 10% of the Group's NBM.

Overview by segment:

31/12/2021 (€ thousands)	Retail, Professional, Corporate and Public Sector Banking	Financial Markets and Institutional Clients	Other	Total
Net interest margin	298.409	113.151	-12.397	399.164
Income from variable-income securities	-	-	23.095	23.095
Fee and commission income	119.359	56.572	19.758	195.689
Income from financial instruments and foreign exchange	5.952	25.600	11.180	42.732
Net Banking Income	**423.720**	**195.324**	**41.637**	**660.680**
Other operating income and expenses	-	-	7.713	7.713
Banking income	**423.720**	**195.324**	**49.349**	**668.393**
General administrative expenses plus valuation allowances in respect of intangible and tangible assets	-258.102	-55.100	-123.068	-436.269
Net allowances for valuation and impairment	21.910	16.530	-7.161	31.279
Income from associates	-	-	121.155	121.155
Income before tax	**187.527**	**156.754**	**40.277**	**384.558**
Tax on income for the period and deferred taxes	-	-	-53.389	-53.389
Minority interests	-	-	-2.115	-2.115
Income/(loss)	**187.527**	**156.754**	**-15.228**	**329.053**
Assets	**24.287.667**	**26.438.855**	**2.698.341**	**53.424.863**
Liabilities	**28.618.302**	**23.334.500**	**1.472.062**	**53.424.863**

31/12/2020 (€ thousands)	Retail, Professional, Corporate and Public Sector Banking	Financial Markets and Institutional Clients	Other	Total
Net interest margin	322.995	75.761	-9.012	389.744
Income from variable-income securities	-	-	15.881	15.881
Fee and commission income	107.588	47.761	16.159	171.508
Income from financial instruments and foreign exchange	5.189	14.381	-1.650	17.919
Net Banking Income	**435.772**	**137.903**	**21.378**	**595.052**
Other operating income and expenses	-	-	12.625	12.625
Banking income	**435.772**	**137.903**	**34.004**	**607.678**
General administrative expenses plus valuation allowances in respect of intangible and tangible assets	-239.632	-59.887	-101.501	-401.020
Net allowances for valuation and impairment	-25.846	-16.401	-4.979	-47.226
Income from associates	-	-	45.813	45.813
Income before tax	**170.294**	**61.614**	**-26,663**	**205.245**
Tax on income for the period and deferred taxes	-	-	-31.334	-31.334
Minority interests	-	-	-1.911	-1.911
Income/(loss)	**170.294**	**61.614**	**-59.907**	**172.001**
Assets	**22.874.280**	**24.864.314**	**2.492.766**	**50.231.360**
Liabilities	**26.816.760**	**22.111.182**	**1.303.419**	**50.231.360**

Contribution by product to net bank margin:

in thousands of euros	31/12/2020	31/12/2021
Deposits from private customers, business customers, corporates, the public sector and institutional clients	93.493	31.909
Loans and advances to private customers, business customers, corporates, the public sector and institutional clients	266.218	309.805
Other products for private customers, business customers, corporates, the public sector and institutional clients	76.060	82.006
Other products	159.281	236.961
Total Net Bank Margin	**595.052**	**660.680**

The growth in net bank margin from deposits from private customers, business customers, corporates and the public sector can be attributed to several effects, including a methodological change to internal transfer pricing generating higher margins on Spuerkeess's liability products.

SPUERKEESS'S GOVERNING BODIES

The organisation of 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, as amended, 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 Spuerkeess'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 31 DECEMBER 2021

CHAIRMAN	Camille Fohl
VICE-CHAIRMAN	Elisabeth Mannes-Kieffer
BOARD MEMBERS	Nima Ahmadzadeh
	Simone Delcourt
	Marie-Paule Gillen-Snyers
	Manuel Nicolas
	Jean-Pierre Zigrand
STAFF REPRESENTATIVES	Carmen Jaffke
	Marilène Marques

BOARD OF DIRECTORS AS FROM 1 JANUARY 2022

CHAIRMAN	Camille Fohl
VICE-CHAIRMAN	Simone Delcourt
BOARD MEMBERS	Nima Ahmadzadeh
	Bettina Blinn
	Marie-Paule Gillen-Snyers
	Manuel Nicolas
	Jean-Pierre Zigrand
STAFF REPRESENTATIVES	Carmen Jaffke
	Marilène Marques

SUPERVISORY COMMISSIONER

Bob Kieffer

EXECUTIVE COMMITTEE AS AT 31 DECEMBER 2021

CHAIRMAN	Françoise Thoma	Chief Executive Officer
MEMBERS	Guy Rosseljong	Deputy Chief Executive Officer
	Doris Engel	Director
	Aly Kohll	Director
	Romain Wehles	Director

STATUTORY AUDITOR

Ernst & Young, Public Limited Company, Luxembourg

Approved by the Board of Directors during its meeting of 30 March 2022.

Luxembourg, 30 March 2022

For the Board of Directors

Camille Fohl
Chairman