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

2023 Audited Consolidated Financial Statements

CONTENTS

PAGE

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

STATEMENT ON THE COMPLIANCE OF THE CONSOLIDATED FINANCIAL STATEMENTS

31 December 2023

Luxembourg, 27 March 2024

<u>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</u>

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 2023 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 2023

2023: Disinflation happened

William Telkes
Spuerkeess Chief Economist

Many forecasters remained very cautious in their economic projections in early 2023. The economic environment was in fact far from favourable, as growth in activity continued to be held back by economic and geopolitical turmoil. In addition, stickiness in inflation prompted the major central bankers to maintain their monetary tightening policies, particularly in the first half of the year.

Global economic growth slowed in this environment. According to the January forecasts released by the International Monetary Fund (IMF), global economic growth was expected to decrease from 3,5% in 2022 to 3,1% in 2023. However, the trajectories of advanced economies and emerging market economies differed widely. Although some vulnerabilities (high public and private debt, real estate crisis, etc.) weighed on China's post-pandemic rebound, emerging countries proved highly resilient. In its latest estimates, the IMF projected that growth for 2023 would be close to that of 2022, i.e. 4,1%, for all these countries.

For most developed countries, the picture was somewhat bleaker, with activity down sharply from 2022. The European Central Bank (ECB) forecast a growth rate of only 0,5% for 2023, so one could even say growth was sluggish for the entire eurozone. Germany also disappointed, as it did not play its role as a driving force. In this global economic environment, Luxembourg was no exception to the general trend. In its most recent "note de conjoncture" published in December, STATEC even expected a slight recession, with an approximately 1% decline in GDP due, among other factors, to highly unfavourable economic conditions in non-financial services and construction. Among developed countries, the United States was the exception despite the concerns that emerged at the beginning of the year about the banking system. The US economy, driven largely by strong household demand and a dynamic job market, has proven more resilient than most European economies. The US Federal Reserve (Fed) had expected growth in activity of close to 2,6% for 2023.

During 2023, this economic slowdown was accompanied by gradual disinflation, i.e. a decline in the inflation rate. While the initial disinflationary trends were still rather subdued at the end of the first half of the year, this disinflation subsequently accelerated. So, for example, in the eurozone, Eurostat figures showed that inflation fell from just over 8,5% (year-on-year) at the beginning of 2023 to just under 3% last December. Although disinflation set in a bit later than analysts had anticipated, it showed that the major central bankers' monetary tightening was working. As a result, in the second half of the year, both the Fed and the ECB decided not to continue their monetary tightening and to leave their key rates unchanged. These monetary policy developments fuelled hopes of a future easing of monetary tightening, which were reflected in a positive trend on the financial markets at the end of the year.

Monetary easing therefore appears to be in the offing for 2024. However, it is difficult to predict the timing of the first monetary easing with any certainty. Inflation developments and changes in economic conditions in the coming quarters will be determining factors. Bear in mind that multiple elections will be held in 2024, and their impacts could be varied and significant. In this uncertain environment, the Fed and the ECB therefore remain extremely cautious about exactly when they will adjust their monetary policies.

Retail & Professional Banking

"***The collaboration between our Retail & Professional Banking, Private Banking, Corporate Banking and Institutional Banking units sets Spuerkeess apart from the competition. With a network of more than 50 bank branches and 400 trained agents, we are leaders in real estate financing and the bank of choice for new customers in Luxembourg. We therefore offer comprehensive banking support.***"

Claude Hirtzig
Head of Retail & Professional Banking

The role of Head of Retail & Professional Banking is to supervise and manage the Bank's Retail operations, as well as to develop and implement the related business strategies. Spuerkeess's objective is to understand its customers' needs and wants in a multicultural country. We help our customers fulfil their goals and stand ready to serve residents of Luxembourg and the Greater Region, whether through our branch network or via our banking app, which has been recognised as the most powerful in the country.

The larger-than-expected rise in interest rates no doubt affected customers' investment activity, but most of all, it had a particularly significant impact on mortgage loan production. The real estate market was therefore hit quite hard in 2023, with applications at times down more than 50% versus the previous year. It should be noted that new loan production had already declined in 2022 due to the first rate hike. We actively offered fixed-rate loans during all the years of historically low interest rates, and this approach has clearly been successful in protecting our customers from the recent sharp rate increases.

Given these circumstances and to maintain our leadership position on the Retail market in Luxembourg, our goal has been to focus on helping customers who may have been affected by higher interest rates, with the aim of making sure they would be able to cope with the rising cost of their real estate loans. We therefore made considerable efforts to proactively contact those customers who were affected by rising interest rates. Our aim was to explain the reasons for and consequences of these higher financing costs, offer alternatives and find solutions, in particular for customers with bridging loans. We therefore used the full range of tools at our disposal to adapt the existing loans to the new situation.

Another major goal achieved in 2023 concerned new customer acquisitions. The number of individuals who became first-time customers thus increased by more than 20%, setting a new record for the Bank. Onboarding still takes place mainly in the branches, but we also work constantly to improve our digital onboarding tools via S-Net. In our branch and web banking channels and from the first moment of contact, we strive to offer the right banking tools to meet the needs of our new customers, whether they are still students, just starting their careers, or newly arrived in Luxembourg.

Our third major objective was to continue to develop our products and partnerships to round out our product range with services and tools that complement our traditional banking offerings. We opened our first co-branded branch with Lalux, an initiative that is just one of the many examples of how our Bank is developing partnerships to provide customers with the best possible experience. At the same time, we have also taken steps to create new partnerships, particularly for vehicle operating leases, to provide our customers with an alternative to personal loan financing.

Our objectives:

- Work diligently and with dedication to help our customers realise their property ownership dreams
- Continue to welcome all customers residing in Luxembourg and the Greater Region, as well as those who would like to move here
- Develop our products and partnerships to better serve our customers

Our results:

- Record level of new customer relationships established in 2023
- Thousands of customers contacted individually and proactively in an effort to provide assistance in a rising rate environment

Our challenges:

- Play our part in the recovery of the Luxembourg real estate market
- Assist our customers with the new energy transition support mechanisms

Our solutions:

- Develop close relationships with customers by introducing daily banking, loan, and investment solutions accessible across all digital channels and in the branches
- Maintain a high level of quality among advisors to help our customers with their banking needs
- Offer our customers suitable money-market investment solutions that provide attractive returns, for both savings accounts and term deposits as well as alternatives such as EMTNs

Private Banking

"***2023 was an excellent year in terms of performance. We were able to deliver added value for our customers in asset management, despite a complex economic and geopolitical environment.***"

Alain Uhres
Head of Private Banking

As Head of Private Banking, my role is to ensure that a suite of services is provided to high net worth private customers. These services include money-market investments, all investment services (securities order execution, investment advice and discretionary management), and financing. I work with my colleagues as sales team leader for about 40 Private Banking account managers and we oversee about 20 individuals who handle investments, coordination, support, reporting and event management.

We set several objectives at the beginning of the year. The first was to establish a dedicated financing team within Private Banking. The second was to introduce a new customer segmentation approach. Lastly, we wanted to expand our investment product range.

After a particularly challenging 2022 for performance on the financial markets, 2023 proved quite positive despite constraints related to geopolitical issues. While 2022 was characterised by a simultaneous fall in the equity and bond markets, these markets both rebounded in 2023. In terms of the challenges we faced, we saw that certain mega-caps outperformed, while sustainable investments were not as robust as other investments. In addition, the central banks' interest rate hikes strongly incentivised our customers to transfer their liquid funds to term deposits. The markets were also favourable for issues of new types of structured products. Lastly, it should be noted that several financing experts were recruited internally.
Overall, we can say that 2023 was an excellent year for Private Banking at Spuerkeess. The rise in interest rates was positive for interest margin and the strong performance by our investment solutions translated into higher fee and commission income. Total assets thus grew by 11,65%.

To conclude, changes in interest rates led to a significant decline in assets in current accounts and savings accounts in favour of term deposits, which recorded a more than 166% increase in assets.

Our objectives:

- Develop a new segmentation for Private Banking
- Create a financing team within Private Banking unit
- Expand the Private Banking product range

Our results:

- 11,7% growth in total assets
- 166,8% growth in term deposit assets
- 5,0% growth in securities assets

Our challenges:

- Rising interest rates
- Diverging sector performances

Our solutions:

- Boost term deposits
- Introduce new structured products
- Increase Private Banking's visibility
- Improve our processes

Corporate Banking

"*We completed the reorganisation of the commercial business lines in 2023, which gave us a better understanding of the needs of our business customers. This has translated into better service for these customers.*"

Nobby Brausch
Head of Corporate Banking

The key factor in 2023 was no doubt soaring interest rates and their impacts on the economy in general, and on companies in the real estate sector in particular. The steep decline in demand from retail customers sharply depressed activity all along the real estate sector value chain, from architects and engineering firms to construction companies and finishing firms to estate agencies, not to mention developers and other related services. A decline in turnover and/or the order book, combined with the sharp rise in interest expense incurred, ultimately weighed heavily on many companies' cash. Our sales teams monitored their customers closely to minimise the negative impact of the deteriorating economic environment on business operations by developing customised financing solutions.

Despite this challenging situation, the Bank did not lose sight of fundamental trends, such as digitalisation and the energy transition.

The Bank's ambitions include expanding the digital services offer and developing services for SMEs. S-Net Business is fully consistent with the vision set out in the "Spuerkeess 2025" strategy. This new software aims to offer the Bank's business customers a new online banking solution that meets both their transaction needs and their cash management, reporting and access management needs. This new solution is expected to launch in 2024.

The Bank is mindful of its role in social and environmental responsibility and continues to raise awareness and to support and assist companies with their energy transition projects and, more broadly, with taking all ESG themes into account.

Internally, the most important project was the reorganisation of the different sales teams. One of the goals was to be able to address the increasingly complex nature of our business customers' activities. Having specialised account managers helps us better understand the needs of these customers so we can serve them better.

Our objectives:

- Reorganise the Corporate Banking business line
- Continue to digitalise our processes

Our results:

- 8,6% increase in outstanding financing amounts

Our challenges:

- Impacts of rising rates on companies
- Energy transition/climate change

Our solutions:

- Development of new digital apps (S-Net Business)
- Advisor specialisation for different customer segments
- Stronger partnerships (Etika, Energieagence)

Expat Services

"***In 2023, we strengthened our brand image as the leading bank for new arrivals in Luxembourg. Thanks to a close collaboration between Expat Services, our branches, and the support services, we demonstrated our commitment to customer experience excellence.***"

Simone van Schouwenburg
Expat Services Manager

Every year, Luxembourg welcomes a growing number of foreign executives with diverse backgrounds. Spuerkeess has established a dedicated banking unit to help these new arrivals make the transition. Since January 2020, our Expat Services unit has successfully launched initiatives targeting our international customers with specific needs. As the first point of contact for executives moving to Luxembourg, Spuerkeess offers a range of essential services such as opening a bank account before arrival, transferring funds, and coordinating with external partners such as insurance companies, telecom operators, real estate players and relocation agencies. Our primary goal is to position Spuerkeess as the leading bank for expats.

We worked with Senior Management to set several objectives for 2023. One was to increase the visibility of the "Expat Services" unit, with the aim of positioning the Bank as a leader on the expat market by strengthening our presence within the international community. At the same time, we worked to raise internal awareness of the service offer for expats in order to educate our colleagues on the challenges that expats face, and draw attention to the wide range of specific services available within the Bank. Creating new partnerships fits into our strategy of establishing connections with providers of complementary services that will enhance the expat offer. In 2023, this collaboration with new companies helped us raise awareness of the Expat Services offer among companies located in Luxembourg, and made it easier for them to integrate their new employees. Similarly, the development of cross-selling has allowed other Bank departments to offer their services to upscale customers. These commercial initiatives are part of a proactive approach aiming to meet expats' specific needs and strengthen Spuerkeess's position as the partner of choice for these international customers.

We developed solutions throughout the year, including workshops for different teams from the relocation unit. We also recognised the importance of maintaining and sustaining existing relationships with our introducer partners, thereby reinforcing the stability of and trust in these strategic collaborations. Holding awareness-raising events in collaboration with various organisations allowed us to quickly adjust the offer based on a competitive analysis and to work closely with other departments, such as Private Banking. Relocation agents helped increase the number of new accounts opened in 2023. These developments highlight the importance of our external partnerships, underscoring the value they add to our communication and marketing actions.

Our objectives:

- Increase the number of introducer partners to facilitate the onboarding of new arrivals
- Intensify our internal communications and promote cross-selling

Our results:

- We raised our profile among our colleagues
- We received 600 onboarding requests through our various Expat partners

Our challenges:

- Be responsive and imagine what it would be like to be newly arrived in Luxembourg
- Continue to offer competitive solutions to meet increasingly specific needs
- Maintain existing relationships with our Expat introducer partners

Our solutions:

- Increase the visibility of our Expat unit with a variety of events targeting the international community
- Develop the bank branch services for expats
- Diversify our services offer through our Expat partners

Digital transformation

"***Through our efforts, our S-Net mobile app is now synonymous with online banking when they talk about it in the financial centre.***"

Christophe Medinger
Deputy Head of Business Unit Digitalisation

In 2023, Spuerkeess launched a new era of digitalisation projects which have seen unprecedented momentum. These initiatives took the form of a series of developments within our online banking platform S-Net, with the introduction of new high value-added features. This progress included the digitalisation of real estate loans (allowing customers to accelerate the process and avoid visiting a branch, if they wish), and the full automation of student loans.

We also paid particularly close attention to the experience of new customers, especially those that already hold Luxtrust products. We have therefore created a quick onboarding process to ensure seamless and immediate integration into our digital universe.

One major challenge was how to improve our business customers' digital experience. Our response will be to launch, in early 2024, our dedicated S-net Business app, designed specifically to meet the particular needs of our corporate customers. This app will offer the premium experience typical of our online banking platform for the general public, S-Net.

As the complexity of IT grows, our IT unit has faced the challenge of meeting specific digitalisation needs. With this in mind, our Bank decided to turn to strategic technical partners. These include i-Hub for the Know Your Customer (KYC) process and Luxhub for open banking-related solutions.

However, the digital transformation also comes with its share of new risks, a reality that our Bank fully acknowledges. We have therefore implemented a series of proactive measures to protect our customers from digital fraud. We are aware of the issues, and have thus also encouraged our customers to stop using the token and switch to the Luxtrust Mobile solution, an approach that aims to strengthen secure authentication in the near future. We firmly believe that customers who are satisfied with the technologies available to them and have been reassured about their security are customers who will remain loyal to our Bank.

Our objectives:

- Improve and expand the range of products accessible through digital channels
- Create a standalone digital solution for our business customers
- Earn our customers' loyalty with a digital solution

Our results:

- We exceeded the 300.000 user mark on S-net
- App Store (Apple): the S-net Mobile app's rating rose from 3,8 to 4,3 (out of a possible 5 points on the App Store's official scale)
- More than 5,4 million logins to S-Net per month (4,6 million in 2022)

Our challenges:

- Protect customers from fraud and scams through technological and educational measures
- Improve our customers' and employees' digital experience

Our solutions:

- Digitalisation of the real estate loan granting process for customers via S-net
- Full student loan digitalisation
- Gradual transition to the Luxtrust Mobile solution
- A faster digital onboarding process for Luxtrust customers

Artificial intelligence at the Bank

"***In 2023, our priorities were to encourage buy-in for data intelligence, promote artificial intelligence, and seamlessly incorporate these developments into our existing processes. Acculturation played a key role in meeting our data objectives.***"

Rachid M'Haouach
Deputy Head of Business Unit Data Management

Data and artificial intelligence drive the global economy and are a real lever for our Bank's efficiency.

At Spuerkeess, we decided to put these technological developments at the centre of our transformation, and have thus used them in many ways to better serve our customers, assist our employees, improve efficiency, assess risks and secure our operations, as well as offer the best services.

First and foremost, our technological approach emphasises the human element, with an ambitious plan to train and acculturate our employees. For the technology component, a dedicated platform has been implemented based on the best market solutions. A data governance strategy has also been rolled out to manage and secure these assets.

Streamlining our data processing tools is critical to executing our strategy. This process has accelerated the convergence of our technology platforms to facilitate value creation and the sharing of our information assets. This approach prompted us to create a data intelligence and data analytics platform to help our employees meet our data objectives.

In 2023, the use of artificial intelligence grew significantly, generating 180 data points through AI or advanced analyses, compared with 93 in 2022. We currently have 15 artificial intelligence models in production, versus 6 at the end of 2022.

For example, we collaborated with the Loan & Credit Management department to implement an AI-based tool. This solution enhances our credit risk management system by identifying and categorising new risk factors. The objective is to anticipate potential future financial difficulties, and thus be able to take timely measures as soon as possible.

Exploiting the data and using artificial intelligence are therefore at the core of our information system as we work to increase our competitiveness in the current financial and technological sphere.

Our objectives:

- Position artificial intelligence as a foundational technology within our Bank
- Accelerate decision-making through data and artificial intelligence
- Improve operational efficiency through automation
- Improve the customer experience through customisation

Our results:

- An enhanced credit risk management system
- Tailored offers for our customers
- Effective automation of repetitive tasks
- More than 60 employees acculturated to data intelligence

Our challenges:

- Respond to regulatory developments in the exploitation of data and artificial intelligence
- Seamlessly incorporate artificial intelligence into existing processes
- Attract the best talent in the face of the shortage of specialised skills

Our solutions:

- Gradual and seamless incorporation of the technologies into our processes
- Acculturation of employees to data and artificial intelligence
- Implementation of a modern data analytics platform
- Coordination of internal communities to join forces for innovation

Taxation

"*Taxation challenges can vary by country, the customer's tax classification, and economic structure. Tax laws can be complicated and difficult to interpret. However, we always seek to ensure vigorous compliance when they are applied to our customers.*"

Marilène Marques
Deputy Head of Business Unit Legal Governance

The Legal Governance Business Unit, through its Tax Support division, is tasked with ensuring that our customers, both individuals and corporate entities, have the proper tax classification, and with overseeing the implementation of automatic exchange of information reporting for jurisdictions participating in the Common Reporting Standard (CRS) and Foreign Account Tax Compliance Act (FATCA) for persons considered to be “US persons”. We also support our individual customers by providing a tax statement that is tailored to the tax rules of their country of residence, which makes it easier for them to complete their tax return.

Taxation at a bank can take several forms for different customers, tax residences, transactions, financial products and services. Our primary goal is tax compliance, i.e. to comply with applicable tax laws. This includes regulatory monitoring of national and international tax obligations that have an impact on our customers' tax classification or on how the financial instruments held by our customers are taxed. Spuerkeess's digital transformation has also prompted us to adjust the way we manage tax data and our processes.

Taxation challenges can evolve due to changes in governmental policies, European and global economic developments, and technological progress. Tax laws can be complicated, changeable and difficult to interpret. The Bank must pay close attention to tax updates, particularly with respect to Luxembourg taxation, European taxation, EU directives and OECD conventions, foreign law on securities taxation, and any change that has an impact on customers' tax classification or on how the financial instruments held by our Bank's customers are taxed.

We use dedicated information systems for the automated preparation of reports on the exchange of information with the tax administration, as well as for the production of sales reports. We work closely with internal and external experts to develop an approach to tax-related legal monitoring and its implementation, in order to identify, limit and reduce the risks that might arise from new tax regulations, and we put robust compliance policies and processes in place.

The combination of specialised knowledge, strict compliance, and adaptability to legislative and technological changes, as well as our responsible approach to our customers, enables us to manage our challenges effectively.

Our objectives:

- Monitor negotiations on national, european and international taxation
- Use technology to effectively manage tax data
- Improve tax documentation processes to make them more digital

Our results:

- Tax classification for all individual and corporate entity customers
- Production of tax statements tailored to the tax residences of individual customers
- Production of tax returns for more than 70 jurisdictions

Our challenges:

- Anticipate and adapt to tax regulations
- Adapt the IT applications used to track regulatory and commercial reporting to changes in legislation

Our solutions:

- Collaboration with taxation experts
- Participation in working groups with financial centre tax experts
- Specific IT support for tax reporting needs

Employer of choice

"*In 2023, we focused on our workforce of the future by transforming our human resources unit from mere operational support into a real partner for the business lines, thereby contributing to the Bank's strategic vision and strengthening our position as an employer of choice.*"

Sandra Schengen
Deputy Head of HR & People Management, Corporate Psychologist

In 2023, Spuerkeess came in first place in Randstad's "Employer Brand Research 2023" study. It is described as an employer of choice that provides a good work environment, attractive career opportunities and long-term job security, while remaining mindful of its social responsibility.

The results of this survey showed that the efforts we have made fully meet the expectations of potential job applicants, and that we must continue to move in this direction.
We face many challenges, however. To attract the best talent, Spuerkeess must be able to provide a rewarding and inclusive work environment focused on offering an enjoyable experience for employees. This starts with the recruitment and onboarding process and covers their entire career path through to their transition to retirement. Spuerkeess must also work to ensure continuous skill development and protect its employees' well-being.

Changes in the world of work are leading to significant shifts within banks' human resources. The workforce of the future is increasingly focused on digital skills, adaptability and creativity. We have to adapt to these changes if we are to remain competitive. In 2023, we implemented a talent management programme aimed at assisting employees with their professional development not only by offering them individual support but also by including them in strategic discussions on topics such as people empowerment, the workforce of the future, risk culture and Spuerkeess as a transition enabler. This programme encourages the development of cross-functional skills, employee engagement and talent retention.

We maintain a constant focus on improving working conditions and reducing psychosocial risks and, as a result, in May 2023 we launched a self-assessment dedicated to evaluating energy levels. The aim was to identify action levers for mental and physical health. Based on the collective results, a health programme was offered to all employees to protect their well-being and support their resilience.

With this in mind, in March 2023 Spuerkeess signed on to the Luxembourg Women in Finance Charter, initiated by the Luxembourg Ministry of Finance and the Luxembourg Bankers' Association (ABBL). The goal is to make the Luxembourg financial sector more inclusive and promote the representation of women at every level. This commitment confirms our determination to follow a consistent trajectory and supplements our internal initiatives, such as our image campaign and an inspirational conference calling for diversified leadership.

In September 2023, Spuerkeess also joined the Ministry of Foreign and European Affairs' national Business and Human Rights Pact which aims to help businesses implement reasonable due diligence in their value chain.
To conclude, we began our initial preparatory work in 2022 with these challenges in mind. In particular, we developed a risk map for human rights in our human resources, purchasing and banking activity processes, and also prepared a roadmap to follow until 2025.

Our objectives:

- Increase the representation of women in senior positions
- Maintain high resilience and energy levels among employees
- Support and strengthen employability through ongoing training

Our results:

- 2,9% increase in women in positions with supervisory responsibilities (+1,9% in 2022)
- 19% increase in hours of training provided in 2023 compared with 2022
- 3.700 job applications, +80% compared with 2022

Our challenges:

- Attract, develop and retain talents
- Uphold our corporate culture
- Provide an attractive work environment

Our solutions:

- Continue our DEI (diversity, equality and inclusion) efforts
- Develop and live our values every day
- Promote our employer brand

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. The operational entities act as the first line of defence while the Risk Management and Compliance departments provide the second line of defence in the Bank's governance model. The Internal Audit department is the third line of defence. The internal control charter developed by the three internal control functions defines the steps that must be taken for the Bank's internal control to function properly: risk identification and management in the first line of defence, and continuous and periodic supervision of risk management in the second and third lines of defence.

Promoting a healthy risk culture is another important pillar of our risk management policy. All Bank staff therefore play an active role in identifying, reporting and monitoring the risks to which the Bank is or might be exposed. Spuerkeess thus takes a positive approach to risk management and internal control.

Every year, the Bank identifies the risks it is exposed to via the Risk Identification and Assessment Process and adopts 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 internal capital adequacy assessment process (ICAAP) and internal liquidity adequacy assessment process (ILAAP) 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. Note 6 to the annual financial statements provides more details on risk organisation and management at Spuerkeess.

FINANCIAL RISKS

CREDIT RISK

Each material Bank commitment giving rise to a credit risk is subject to prior analysis of the borrower's credit quality by the Loan & Credit Management department. The borrower's credit quality is assigned a 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 Enterprise Risk Management unit within the Risk Management department is responsible for developing the internal rating models. The Financial Risk Management unit within the Risk Management department, as the second line of defence, produces analyses and reports on credit risk in the Bank's various sub-portfolios. 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. 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.

MARKET RISK

Interest Rate Risk in the Banking Book (IRRBB) is the main market risk to which the Bank is exposed. In recent years, the ALM unit within the Global Markets department has developed models to analyse customers' behaviour, which can help 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 line of defence; the Financial Risk Management unit within the Risk Management department, as the second line of defence, is responsible for supervising this system. Interest rate volatility and the impacts of this situation on interest rate risk management remain a major challenge for the Bank.
Another material market risk for the Bank is the valuation risk on the Bank's shareholdings. This risk is monitored and measured using the Value-at-Risk (VaR) approach.

LIQUIDITY RISK

Liquidity risk is managed by the Global Markets department in accordance with the limit framework defined in the RAF. Liquidity risk management is supervised by the Financial Risk Management unit within the Risk Management department, as the second line of defence. 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.

CLIMATE AND ENVIRONMENTAL RISKS

Climate and environmental risks are viewed as risk drivers of other categories of risks (mainly financial risks). The Bank has therefore defined certain indicators and limits to manage the reputational risk and the credit risk related to transition risk. In addition, the Bank continues to incorporate climate and environmental risks into its risk management by implementing approaches that quantify these risks. The lack of representative data is one of the main challenges in this context.

NON-FINANCIAL RISKS

OPERATIONAL RISK

The roles and responsibilities of the first and second lines of defence are highlighted in the Internal Control Charter and the Operational Risk Management Policy. Operational risks can materialise across all the Bank's activities. As the first line of defence, all staff are therefore responsible for managing these risks. The Non-Financial Risk Management unit within the Risk Management department serves as the second line of defence. We aim to reduce operational risk by continuously improving our processes and organisational structures. To facilitate these initiatives, the Bank is migrating to a governance, risk and compliance (GRC) tool to coordinate the risk and control self-assessments (RCSAs), manage incidents and monitor action plans.

IT AND CYBER RISKS

As the first line of defence, the IT department is responsible for managing the Bank's IT and cyber risks. The Non-Financial Risk Management unit within the Risk Management department supervises IT and cyber risk management. An Information Security Officer in the Non-Financial Risk Management unit is responsible for overseeing IT security, reports to the head of the Risk Management department and has a direct reporting line to the Chief Risk Officer, who is a member of the Executive Committee. This IT and cyber risk management structure allows the Bank to operate within the limits set in the Risk Appetite Framework (RAF). The analysis of the risks related to IT projects and changes and the analysis of IT incidents are important processes in IT risk management, for both the first and second lines of defence.

MODEL RISK

Any Bank entity that develops internal models creates model risk and must manage this risk as the first line of defence. Model risk management is supervised by the Non-Financial Risk Management unit within the Risk Management department. This supervisory role is performed through the processes in place for the initial and periodic validation of the Bank's models. The validation activities are developed and organised as part of a validation plan and adhere to the principles included in the "Model Risk Management Policy". All stakeholders involved in the Bank's models come together once a month as part of a "Model Working Group".

AML/FT RISK

The fight against money laundering and the financing of terrorism (AML/FT) is a constant concern and daily priority for Spuerkeess.

Implementation of the professional obligations applicable to Spuerkeess relies on a conservative "AML/FT risk appetite" (revised annually and approved by the Board of Directors and then communicated to all Bank staff) and the rollout of a robust system defined according to a risk-based approach applicable to all Bank customers.

This system also covers prevention of market abuse, namely insider trading and market manipulation, as well as compliance with sanctions and embargoes. As such, Spuerkeess strictly applies the restrictive measures provided for by the European Union. Spuerkeess also complies with certain regulatory provisions in place in foreign jurisdictions regarding financial sanctions relating to business relationships established with correspondent banks.

The commercial departments and the AML Office unit (representing the first line of defence) and the Financial Crime and Compliance unit (within the Compliance department, the second line of defence) are jointly responsible for implementing AML/FT procedures and controls. The separation between AML/FT risk management and supervision was strengthened with the creation of the AML Office unit, whose role is to perform the "Know Your Customer" and "Know Your Transaction" tasks for all Bank customers. At the Compliance department level, the Financial Crime Compliance (FCC) unit is responsible for managing AML/FT risks by defining the applicable standards, advising the Bank's other business lines, analysing the matters brought to its attention, training employees or ensuring that they are trained and, ultimately, supervising the risk management carried out by the first line of defence through the implementation and execution of its control plan.

Lastly, the Bank actively cooperates with the Luxembourg authorities responsible for AML/FT, and the FCC is their designated point of contact. The FCC thus analyses files with suspicious AML/FT activity, files suspicious activity reports, and is responsible for responding to the competent authorities, namely the Financial Intelligence Unit, the Luxembourg Ministry of Finance and/or the CSSF, depending on the type of suspicious activity.

CONDUCT RISK AND PREVENTION OF INTERNAL FRAUD

All employees pledge to strictly comply with the Code of Conduct on their first day of employment. This Code is supplemented and updated every year. Spuerkeess has assigned a Fraud Protection Officer to supervise internal and external fraud risk. This person defines the standards and best practices and coordinates the prevention system for the two lines of defence.
Maintaining high standards of ethical and professional conduct and effectively managing internal fraud risk requires a prevention system and a control system overseen by the Conduct & Controls unit within the Compliance department, which educates staff on compliance with the Code of Conduct, including conflict of interest issues.

The Conduct & Controls unit performs controls aimed at detecting misconduct and fraud and also conducts internal investigations. Similarly, this unit analyses reports of suspicious activity made internally (branches, units) and externally (complaints from customers about a Spuerkeess employee).

DATA PROTECTION

Protecting the personal data of our customers, staff and suppliers is a core concern for Spuerkeess. The Data Protection Officer, who is part of the Compliance department, is committed to providing all employees with regular training on this important topic and participates in project governance, with the aim of ensuring data protection by design for every new product or service. 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 Officer is exclusively responsible for collaboration and contact with the CNPD (Luxembourg's National Data Protection Commission).

COMPLIANCE AND REPUTATIONAL RISK

Sanction risk may take the form of legal, administrative or disciplinary sanctions due to failure to comply with provisions specific to banking and financial activities, while reputational risk and the risk of damage to our brand image arises from negative rumours, scandals, disputes and the imposition of a sanction.

To prevent, manage and mitigate these risks, the Compliance function performs a regulatory watch based on a federated model that empowers the different players and separates the verification functions (second line of defence) from the operational functions (first line of defence).

OTHER RISKS

MANAGEMENT AND MONITORING OF RISKS INHERENT IN COMPILING FINANCIAL REPORTING

Spuerkeess has developed procedures and control systems to compile and monitor financial information. To provide an assurance of the quality and completeness of financial information, Spuerkeess 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. Spuerkeess reconciles the balances of pending accounts, interest accrual accounts and other internal accounts on a monthly basis.
The different teams and lines of defence concerned continuously share information 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, Spuerkeess regularly monitors its profitability by customer, product and business line and conducts a monthly analysis of the spending budget. The Executive Committee uses the 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.

OTHER ACTIVITIES

Other activities include back office and support activities, which play an essential role in supporting the Bank's strategic and development goals. Back office activities make it possible to process the growing volumes of payment, credit and securities transactions from the commercial units and ensure control and security in processing these transactions in accordance with the laws in force. We continue our efforts to improve our systems and 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.

BACK-OFFICE ACTIVITIES

The Payments Business Unit coordinates and manages activities related to payment services that support transfers, direct debits, debit cards, credit cards, Payconiq, cash, banking packages, current accounts, savings accounts and deposits. This also includes case management in the event of customer queries (information, complaints, fraud). It also manages the relationships and contracts with external service providers, interbank payment systems and payment schemes. It provides business support for electronic channels such as S-Net, Multiline and Payconiq. It acts as Registration Office for the issuer of LuxTrust certificates. It is also responsible for printing and sending out hard-copy reports, implementing electronic management of paper documents produced in the normal course of business, and dealing with the post.

The Securities & Markets Operations department carries out several complementary activities that can be classified into six categories. Accordingly, the teams handle the post-trade component of capital market transactions (e.g. settlement, delivery, corporate actions, custody, tax services) and the post-trade component of financial market transactions (derivatives, forex, repos, money market). In addition, the department is responsible for regulatory transaction reporting (MiFIR, EMIR, SFTR, etc.) and for the Bank's network management, as well as for cash and securities reconciliation. Lastly, the department also manages the Bank's securities value database and provides services to securities issuers.

The Loan & Credit Management department serves as the first line of defence for credit risk management. It is responsible for updating Spuerkeess's Credit Risk Management Policy. The department participates in the processes inherent to granting and monitoring loan and credit products for individuals, corporates, the public sector and institutional customers, as well as in the management of credit risk for Spuerkeess's Global Credit Investments portfolio.

For the loan and credit processes, the department develops sector view and credit risk limit proposals, assesses the real and personal property collateral offered as security, analyses loan applications and participates in decisions on whether to grant credit under the powers assigned to it by Spuerkeess's Executive Committee. It also handles contract preparation, monitoring of the loans, and their periodic review. The department is responsible for coordinating the monitoring of credit risk, for proposing provisions and for producing and analysing the aggregate credit risk indicators and reports.
For the international investment portfolio activities, the department is responsible for suggesting concentration limits, analysing the credit risk of the investments proposed by the trading floor, and monitoring sector risks and the risks associated with the exposures held in the investment portfolio.

The Innovation & Project Management department is tasked with managing innovation and the Bank's cross-functional strategic and regulatory projects. The innovation component mainly involves introducing new ways of working and the implementation of knowledge management and user experience (UX) design. One of the Innovation team's other tasks is to maintain, but also mostly to develop, the S-Net Mobile and S-Net Desktop Internet banking tool. The Project Management team is focused on cross-functional and priority issues for the Bank. Part of this team works to optimise the Bank's work processes and implement efficient project governance at the Bank level (including a project management tool). The other part consists of project managers who coordinate the project portfolios and manage the cross-functional strategic or regulatory projects and programmes.

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 La Luxembourgeoise 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.
Since December 2022, Spuerkeess has held a 20% equity interest in i-Hub, a start-up launched by POST Luxembourg that is focused on automating AML/KYC processes.
In early December 2023, Spuerkeess participated in the creation of the LuxConstellation S.A. joint venture, taking a 30% stake. This is a partnership between six major financial services players in Luxembourg to create a shared network of ATMs by 2025.
Media and telecommunications are important sectors for Luxembourg’s economy. The Bank is a founding shareholder of SES S.A., one of the world leaders 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 Fiduciary Depositary Receipts (FDRs) by virtue of its 1,28% interest in the share capital of SES S.A. These FDRs are quoted on the market and are convertible into an equivalent number of SES's Class A shares. 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. For companies in the border region, this mainly includes EUREFI S.A., 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, and 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 2023 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. All the details on the Bank's energy transition are published in this sustainable development report.

THE SPUERKEESS GROUP'S FINANCIAL RESULTS AS AT 31 DECEMBER 2023

The Spuerkeess Group comprises Spuerkeess, Luxembourg as the parent company and its fully consolidated subsidiaries and associates consolidated using the equity method. At EUR 1.087,8 million as of 31 December 2023, the Group's bank margin was up EUR 340,8 million (45,6%) compared with the 2022 financial year.

The Group's net interest margin thus rose by 60,3%, or EUR 294,4 million compared with the previous financial year. This improvement reflects the business development in its activities in recent years, as well as the rise in interest rates, which made it possible to rebuild margins on bank liability products for all customers. During the period when central banks' monetary policy caused key rates to fall into negative territory, margins on some of these products were negative for several years. The gradual rise in key rates throughout 2023 allowed Spuerkeess to offer attractive returns on products such as savings accounts and term deposits. The ECB's targeted longer-term refinancing operations (TLTROs), which aimed to support bank lending activity during the crisis years, had only a negligible impact on interest margin in 2023. In fact, Spuerkeess repaid the last tranche of amounts borrowed through this mechanism before the end of the first half of 2023.

The Group's fee and commission income was down 3,7%, reflecting a significant reduction in demand for real estate loans in a climate of uncertainty and rising interest rates. The positive change in income from current account transactions and other deposits, along with the increase in UCI administration fees, helped mitigate the decline in fees and commissions.

Income from the Group's shareholdings was EUR 45,6 million at end-2023, up EUR 9,6 million (26,8%) from the previous year, due to higher dividends received from some of the Group's parent company's strategic holdings.

Income from financial instruments increased from EUR 2,7 million at the end of 2022 to EUR 51,5 million as at 31 December 2023. The increase in this category was largely due to unrealised gains on hedging financial instruments, classified for accounting purposes as held for trading, and financial instruments measured at fair value through profit or loss due to yield curve and exchange rate volatility.

Other operating income and expenses rose to EUR 13,1 million at year-end 2023 from EUR 11,3 million at the end of 2022. The nature of its composition makes this item volatile and the change is mainly due to specific non-recurring factors.

Spuerkeess made its contribution to the national compartment of the "Fonds de Résolution Luxembourg" (Luxembourg resolution fund, or FRL), which gradually merged over an eight-year period with the single resolution fund established by the Single Resolution Mechanism. These two contributions combined totalled EUR 35,0 million for 2023.

Total general expenses were therefore up 5,1%. The growth in general expenses stemmed mostly from structural wage growth and the February, April and September 2023 index bracket payments. The ongoing digitalisation and process optimisation efforts improved productivity and limited the increase in general expenses.

The cost of risk had a considerable influence on the trend in Spuerkeess income in 2023. Given the deterioration in the economic environment, the Bank protected itself from credit risk by recording value adjustments and provisions totalling EUR 132,7 million versus an allocation of EUR 62,1 million recorded in 2022. The increase in provisions stemmed, first, from the rise in exposures in default and the conservative treatment of exposures that have been restructured to help customers recover from financial difficulties and, second, from the use of better models to detect and quantify credit risks.

The Spuerkeess Group therefore posted net income of EUR 449,3 million for the 2023 financial year, up EUR 76,1 million (+20,4%) from net income of EUR 373,1 million in the prior year. This performance, which can be attributed mainly to a sharp rise in bank margin, was driven by strong growth in the interest margin on customer deposit products.

ANALYSIS OF MAIN BALANCE SHEET ITEMS

The balance sheet totalled EUR 56.184,4 million as at 31 December 2023, an increase of EUR 103,0 million compared with 31 December 2022.

On the asset side of the balance sheet, "Cash and sight accounts with central banks" fell by EUR 2.960,0 million to EUR 7.887,8 million at end-2023, mainly because of the decrease in assets deposited with Banque Centrale du Luxembourg (BCL).

Customer deposits totalled EUR 40.039,2 million, a decrease of EUR 1.087,1 million compared with 31 December 2022. The decline in this item stemmed mainly from the decrease in public sector deposits, which are more volatile.

Credit institution deposits decreased by EUR 257,7 million and totalled EUR 5.424,7 million. This item also includes bank deposits collateralised with securities and liabilities received in TLTRO III operations; early repayments of the liquidity lent by the European Central Bank account for some of this change.

Issues of securities increased by EUR 1.026,8 million to EUR 3.837,5 million at end-2023. This increase stemmed from more extensive use of Euro Commercial Paper (ECP) and US Commercial Paper (USCP) refinancing programmes to further diversify the Bank's sources of financing.

Outstanding fixed-income securities recognised at amortised cost amounted to EUR 14.831,1 million, up EUR 1.244,9 million compared with 31 December 2022. This change was due to the higher rate environment, which bolstered investment opportunities.

The outstanding amount of financial assets mandatorily recognised at fair value through profit or loss totalled EUR 430,9 million, a decrease of EUR 59,8 million compared with 31 December 2022. 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 this type of security.

The outstanding amount of variable-income securities recognised at fair value through the revaluation reserve was EUR 755,1 million, down EUR 137,6 million compared with 31 December 2022, due to the downward trend in the measurements of certain shareholdings.

Investments in associates accounted for using the equity method increased by EUR 60,5 million to EUR 907,2 million at 31 December 2023, due mainly to the favourable change in measurements in the relevant business sectors.

Compared with 31 December 2022, the outstanding amount of investments with credit institutions increased by EUR 1.786,7 million to EUR 3.244,7 million at 31 December 2023. This item also includes the Bank's deposits with other banks, whether or not they are collateralised with securities.

Outstanding customer loans totalled EUR 26.967,7 million at 31 December 2023, an increase of EUR 262,3 million since 31 December 2022. The increase was driven by the development of the corporate and public sector loan activities. Outstanding amounts of housing loans fell, however, due to the impact of rising interest rates on new production throughout 2023.

Non-current assets and disposal groups or groups classified as held for sale stood at EUR 0,9 million at 31 December 2023. This amount involves a shareholding held for sale as part of a share buyback programme that will be completed in 2024.

In accordance with Article 38-4 of the Amended Law of 5 April 1993 on the Financial Sector, the Bank reported its return on assets, which stood at 0,80% versus 0,67% in the prior year.

CHANGE IN OWN FUNDS

The Spuerkeess Group's total equity attributable to the parent company amounted to EUR 5.834,8 million as at 31 December 2023 compared with EUR 5.631,4 million at the end of 2022, i.e. an increase of 3,6%.

This EUR 203,5 million increase in equity consisted of:
- a EUR 334,3 million increase in the reserve, after distribution of part of the profit for financial year 2022 and the impact of first-time application of IFRS 9 and IFRS 17 by one Group entity;
- a EUR 76,1 million increase in 2023 income;
- a EUR 80,4 million decrease in actuarial gains or losses on the employee pension fund due to the increase in actuarial rates;
- a EUR 133,6 million decrease in the revaluation reserve due mainly to a decrease in the value of strategic holdings;
- a EUR 21,6 million increase in the equity method adjustment;
- a EUR 14,5 million decrease in other items due to lower gains realised this year on sales of variable-income securities recognised at fair value through the revaluation reserve.

2024 OUTLOOK

In January, the International Monetary Fund (IMF) slightly raised its growth forecasts for the global economy. Based on its analyses, stronger-than-expected disinflation and relatively resilient growth should help avert a hard-landing scenario for the global economy. In addition, the IMF stressed that the (upside and downside) risks to the global economy are broadly balanced. The IMF thus raised its growth forecast for the global economy by 0,2 percentage point and now expects annual growth of about 3,1%. However, it should be noted that this figure remains below the long-term average (3,8%). The better performance expected is largely due to the resilience seen in the United States and in most emerging economies. In contrast, the IMF lowered the growth outlook for the eurozone for 2024 by about 0,3 percentage point. For 2024, the institution anticipates eurozone growth of only 0,9%. Global inflation is expected to continue to weaken and to fall from 6,8% in 2023 to 5,8% in 2024, according to the IMF's January forecasts. In this environment, growth in Luxembourg is also expected to remain weak and below its long-term averages, but above that of the eurozone as a whole. According to STATEC's preliminary data, growth in the Luxembourg economy (in volume terms) is expected to be around 2%, versus a long-term average of about 3,2%. STATEC expects inflation to fall back below 3% (2,2% for 2024).

EVENTS AFTER THE REPORTING PERIOD

Central bankers remained very cautious in their actions in early 2024. The most recent announcements by the US Federal Reserve (Fed) significantly reduced the likelihood of a first rate cut in March 2024. Following on its heels, the European Central Bank (ECB) considers an initial rate cut to be more likely starting in the early summer, while stressing that disinflation continues as expected. Against this backdrop, and as demonstrated by the eurozone's latest PMIs, the economic recovery has been slow to materialise. Even though the latest PMI figures show signs of improvement, they are still weak and suggest that activity remains in contraction territory. This reduced economic momentum has also been reflected in Luxembourg in industry and, in particular, in construction. Furthermore, based on the opinion of Luxembourg's Economic Committee ("Comité de conjoncture") of 23 January 2024, the Luxembourg government decided to declare some branches of the construction sector in crisis for a six-month period. The Luxembourg government announced several support measures to revitalise the real estate construction sector. These different measures should help not only to improve access to home ownership/rental, but also to promote investment in this sector. As of the date of this report, these events have not had a significant impact on the normal course of Spuerkeess's business.

Luxembourg, 27 March 2024

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 2023

Building a better working world

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-1930 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 2023, 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 2023, 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 for 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 6,4 billion, including a balance of expected credit losses for individual risks of EUR 167,2 million.

The application of value adjustments to such instruments requires judgment by the Executive Committee which is based on a credit analysis prepared by the department in charge of credit risk monitoring following the principles of the IFRS 9 standard regarding the determination of depreciations for expected credit losses. This calculation is based on a categorization of all credits based on the change of their internal ratings (the “staging”) and on estimates primarily related to probabilities of defaults and effective exposures at 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 level of depreciations needed. For the year ended 31 December 2023, this process continued to be impacted by the rise of interest rates, the uncertainties and risks coming from the macro-economic and geopolitical evolution together with the unfavorable evolutions of the real estate market of the country.

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 macro-economic and geopolitical evolutions and related economic uncertainties impacting hypothesis that are influencing the 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 2023.

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 approval and granting process of loans, the internal rating process of “Corporate” clients, to the initial and subsequent valuation of real estate assets brought as guarantee, and to the processes of identification of exposures at risk within the Group, together with the periodical review of these exposures.

We reviewed the internal documentation and conducted interviews with the heads of departments in order to validate the approach applied by the Group to categorize loans and advances to “Corporate” customers (the “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 specific impairment for these exposures.

Furthermore, in order to respond to the impacts of the macro-economic evolutions as well as its geopolitical uncertainties, we have reviewed the Group's approach to identify and monitor high-risk sectors and the impact on internal ratings. Our procedures notably included a critical examination of the identified sectors as high-risk as well as the specific reviews carried out by the Group of loans and advances granted to companies in these industries through their integrated strategy relating to vulnerabilities.

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.

Lastly, 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.

Depreciation of mortgage loans at amortized cost for retail customers

Mortgage loans to retail 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 for 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 17,1 billion, including a balance of expected credit losses for individual credit risks of EUR 81,2 million.

The application of value adjustments to such instruments requires judgment by the Executive Committee which is based on a credit analysis prepared by the department in charge of credit risk monitoring following the principles of the IFRS 9 standard regarding the determination of depreciations for expected credit losses. This calculation is based on a categorization of all credits based on the change of their internal ratings (the “staging”) and on estimates primarily related to probabilities of defaults and effective exposures at 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 significant increase in credit risk and to determine the required levels of depreciations needed. For the year ended 31 December 2023, this process continued to be impacted by the rise of interest rates, the uncertainties and risks coming from the macro-economic and geopolitical evolution together with the unfavorable evolutions of the real estate market of the country.

We have considered the depreciations of mortgage loans to retail customers as a key audit matter because of their importance in term of presentation in the financial position and the statement of comprehensive income ending on 31 December 2023, and 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 interest rates environment on the population having contracted loans at variable rates or at adjustable fixed rates, uncertainties linked to the evolution of the prices of real estate which serve as guarantees for this type of loan, and macro-economic turbulences resulting in a sharp rise in inflation which impacts the purchasing power of borrowers. All of these events having an impact on the assumptions influencing the expected credit losses.

How the matter was addressed in our audit

Within the context of the audit, we proceeded with walkthroughs and test of controls related to approval and granting process of mortgage loans, the internal rating process of retail clients, to the initial and subsequent valuation of real estate assets brought as guarantee, and to the processes of identification of exposures at risk within the Group, together with the periodical review of these exposures.

We reviewed the internal documentation and conducted interviews with the heads of departments in order to validate the approach applied by the Group to categorize loans and advances to retail customers (the “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 in connection with the assessment of the level of impairment of mortgage loans through interviews, the review of key controls, the review of governance and decision protocols as well as validation by Management of levels of specific value adjustment for some of these defaulted exposures.

We reviewed the implementation of the internal rating model, its implementation by the Group, the controls put in place on the valuation of real estate guarantees taken by the Group in the context of mortgage loans as well as the automatic revaluation system for mortgage guarantees.

We also looked at the monitoring of the rising interest rates shock on retail mortgages and the construction of this analysis, the hypothesis selected by the Group and the settings used (exposures, incomes and disposable incomes, family situation, guarantees, remaining income, etc.). We have made a test of controls on the monitoring of bridge loans. Lastly, we inquired with the heads of the service that monitors mortgage loans in order to understand the measures implemented by the Group and proposed to its customers deemed to be the most at risk by the current interest rate environment.

In addition, with the use of our data analysis tool, we reviewed the portfolio as a whole and selected a sample, based on several qualitative and quantitative factors, of mortgage loans granted to retail customers and performed a test of detail on this same sample including renegotiated credits and monitoring of overruns.

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 6 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 2023 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 2023, identified as R7CQUF1DQM73HUTV1078-2023-12-31-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

Luxembourg, 10 April 2024

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 2023

Consolidated balance sheet as at 31 December 2023

ASSETS in euros	Notes	01/01/2022	31/12/2022	31/12/2023
		Restated	**Restated**	
Cash and sight accounts with central banks	4.1	9.773.732.257	10.847.765.699	7.887.777.548
Loans and advances at amortised cost – Credit institutions	4.2	1.346.631.751	1.457.998.005	3.244.670.787
Loans and advances at amortised cost – Customers	4.3	25.246.693.237	26.705.358.823	26.967.687.941
Financial instruments held for trading	4.4 4.12	235.242.636	132.075.729	178.037.790
Hedging derivative financial instruments	4.12	90.195.038	1.462.544.131	1.115.570.816
Financial assets mandatorily recognised at fair value through profit or loss	4.5	632.455.934	490.686.909	430.875.837
Fixed-income securities recognised at amortised cost	4.6	13.821.928.357	13.586.207.982	14.831.125.424
Fixed-income securities recognised at fair value through the revaluation reserve	4.7	17.534.901	29.626.380	31.091.835
Variable-income securities recognised at fair value through the revaluation reserve	4.8	1.125.045.988	892.667.729	755.072.291
Investments in associates accounted for using the equity method	4.9	667.572.239	846.683.867	907.201.359
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	4.13	156.504.244	-752.334.874	-488.436.242
Tangible assets for own use	4.14	257.157.451	241.057.335	232.899.258
Investment property	4.15	10.430.664	11.343.967	10.643.297
Intangible assets	4.16	34.200.035	40.995.209	47.321.022
Non-current assets and disposal groups classified as held for sale	4.17	-	-	919.434
Current taxes	4.18	70.166.184	78.491.337	2.560.981
Deferred taxes	4.18	26.057.864	-	-
Other assets	4.19	9.373.000	10.262.100	29.375.923
TOTAL ASSETS		**53.520.921.780**	**56.081.430.328**	**56.184.395.301**

LIABILITIES in euros	Notes	01/01/2022	31/12/2022	31/12/2023
		Restated	**Restated**	
Deposits at amortised cost – Credit institutions	4.20	6.934.711.998	5.682.385.528	5.424.710.317
Deposits at amortised cost – Customers	4.21	36.906.630.696	41.126.287.235	40.039.164.316
Financial instruments held for trading	4.4 4.12	129.935.940	294.865.180	285.193.752
Hedging derivative financial instruments	4.12	827.678.271	307.181.440	399.928.461
Financial liabilities designated at fair value through profit or loss	4.22	165.001.798	131.633.032	169.491.843
Issuance of debt securities	4.23	2.793.469.938	2.679.078.951	3.668.005.029
Provisions	4.24	48.103.059	64.206.549	82.082.237
Other liabilities	4.25	33.982.358	38.362.362	89.917.467
Deferred taxes	4.18	-	26.734.754	4.203.819
Provision for employee benefits	4.26	367.952.878	96.253.102	183.854.377
Sub-total of LIABILITIES (before equity capital) to be carried forward		**48.207.466.936**	**50.446.988.133**	**50.346.551.618**

The notes on pages 49 to 194 are an integral part of these consolidated financial statements

Consolidated balance sheet as at 31 December 2023 (continued)

EQUITY in euros	Notes	01/01/2022	31/12/2022	31/12/2023
		Restated	**Restated**	
Sub-total of LIABILITIES (before equity capital) carried forward		**48.207.466.936**	**50.446.988.133**	**50.346.551.618**
Share capital		173.525.467	173.525.467	173.525.467
Consolidated reserves		3.980.009.924	4.319.474.042	4.653.807.232
Other items of comprehensive income		827.910.223	765.247.562	558.232.636
° *Variable-income securities recognised at fair value through the revaluation reserve*	*4.8*	*844.771.939*	*609.237.755*	*474.487.166*
° *Actuarial gains/losses relating to employee benefits*	*4.26*	*-371.100.157*	*-174.149.136*	*-254.572.242*
° *Equity method adjustment*		*326.077.809*	*318.580.104*	*340.144.154*
° *Gains or losses on disposals of variable-income securities measured at fair value*	*4.27*	*27.349.601*	*14.531.312*	*6.474*
° *Fixed-income securities recognised at fair value through the revaluation reserve*	*4.7*	*15.006*	*-2.956.580*	*-1.842.641*
° *Cash flow hedges*	*4.12*	*796.025*	*4.107*	*9.725*
Income for the year		329.053.453	373.127.192	449.271.403
Sub-total of equity attributable to equity holders of the parent company		5.310.499.067	5.631.374.263	5.834.836.738
Non-controlling interests		2.955.777	3.067.932	3.006.945
Total equity		**5.313.454.844**	**5.634.442.195**	**5.837.843.683**
TOTAL LIABILITIES, including EQUITY		**53.520.921.780**	**56.081.430.328**	**56.184.395.301**

The notes on pages 49 to 194 are an integral part of these consolidated financial statements

Consolidated income statement as at 31 December 2023

in euros	Notes	31/12/2022	31/12/2023
		Restated	
Interest income	5.1	488.247.873	782.614.169
Income from securities	5.2	35.996.778	45.643.138
Fee and commission income	5.3	200.738.671	193.303.544
INCOME FROM INTEREST, DIVIDENDS AND FEES AND COMMISSIONS		**724.983.322**	**1.021.560.851**
Income from financial instruments not recognised at fair value through profit or loss	5.4	62.443	-1.145.473
Income from financial instruments held for trading	5.5	-20.784.039	10.992.257
Income from financial instruments designated at fair value through profit or loss	5.6	35.047.621	-11.419.433
Income from financial instruments mandatorily measured at fair value through profit or loss	5.7	-32.605.458	18.715.897
Income from hedging transactions	5.8	-6.403.336	13.638.513
Foreign exchange income	5.9	27.414.868	20.753.690
Income from derecognition of non-financial assets	5.10	8.065.407	1.629.409
Other operating income	5.11	14.214.396	17.594.252
Other operating expenditure	5.11	-2.940.934	-4.508.484
BANK MARGIN		**747.054.290**	**1.087.811.479**
Personnel expenses	5.12	-256.197.262	-273.994.159
Other general and administrative expenses	5.13	-103.750.198	-112.168.600
Cash contributions to resolution funds and deposit guarantee systems	5.14	-41.738.472	-34.989.578
Allowances for impairment of tangible and intangible assets	5.15 5.16 5.17	-45.874.264	-49.412.651
INCOME AFTER GENERAL EXPENSES		**299.494.094**	**617.246.491**
Net allowances for impairment of individual and collective credit risks	5.18	-45.892.748	-121.486.311
Provisions	5.19	-16.232.740	-11.232.253
Share in the profit of equity-accounted associates	5.20	182.490.382	48.158.925
INCOME BEFORE TAX		**419.858.988**	**532.686.852**
Tax on income from continuing operations	5.21	-56.026.836	-77.832.202
Deferred taxes	5.21	11.506.558	-3.466.548
INCOME FOR THE YEAR		**375.338.710**	**451.388.102**
of which income for the year attributable to			
- non-controlling interests		*2.211.518*	*2.116.699*
- equity holders of the parent company		*373.127.192*	*449.271.403*

The notes on pages 49 to 194 are an integral part of these consolidated financial statements

Consolidated statement of comprehensive income as at 31 December 2023

in euros	Notes	31/12/2022	31/12/2023
		Restated	
INCOME FOR THE YEAR		**375.338.710**	**451.388.102**
Items not reclassified in net income subsequently		**-31.549.555**	**-193.603.172**
Actuarial gains/losses relating to employee benefits	4.26	262.391.449	-107.145.093
Share in the profit of equity-accounted investments in associates	4.9	-7.497.705	21.564.050
Variable-income securities recognised at fair value through the revaluation reserve	4.8	-220.718.245	-134.454.303
° *Variation in measurement results*		*-235.249.631*	*-134.398.077*
° *Income from sales*		*14.531.386*	*-56.226*
Impact of deferred and current taxes		-65.725.054	26.432.174
Items to be reclassified in net income subsequently		**-3.763.503**	**1.119.556**
Fixed-income securities recognised at fair value through the revaluation reserve		-3.958.949	1.484.065
Cash flow hedges		-1.055.045	7.484
Impact of deferred taxes		1.250.491	-371.993
Total items of comprehensive income for the year - net of tax		**-35.313.058**	**-192.483.616**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**340.025.652**	**258.904.486**
share attributable to			
- non-controlling interests		*2.211.518*	*2.116.699*
- equity holders of the parent company		*337.814.134*	*256.787.787*

Consolidated statement of changes in equity as at 31 December 2023

For financial year 2024, Spuerkeess plans to distribute EUR 120 million from 2023 net profit to the Luxembourg State in 2024.

Pursuant to CSSF Regulation No. 14-02 relating to the determination of distributable results and reserves of credit institutions applying the fair value measurement in the statutory accounts, an amount of EUR 20.195.475 for financial year 2023 and an amount of EUR 29.652.708 for the previous financial year should be considered as non-distributable results in accordance with the provisions of this regulation.

in euros	Share capital	Consolidated reserves	Other items of comprehensive income	Net income	Total equity – holders of the parent	Non-controlling interests	Total equity
		Restated		**Restated**	**Restated**		**Restated**
As at 1 January 2022	**173.525.467**	**3.883.953.142**	**827.910.223**	**329.053.453**	**5.214.442.285**	**2.955.777**	**5.217.398.062**
Impact of application of IFRS 17 for insurance entities	-	96.056.782	-	-	96.056.782	-	96.056.782
As at 1 January 2022 restated	**173.525.467**	**3.980.009.924**	**827.910.223**	**329.053.453**	**5.310.499.067**	**2.955.777**	**5.313.454.844**
Appropriation of 2021 income	-	329.053.453	-	-329.053.453	-	-	-
Appropriation of 2021 income from sales of variable-income securities	-	27.349.601	-27.349.601	-	-	-	-
2022 net income	-	-	-	373.127.192	373.127.192	2.211.518	375.338.710
Distribution for FY 2021	-	-40.000.000	-	-	-40.000.000	-	-40.000.000
Actuarial gains/losses relating to employee benefits net of deferred taxes	-	-	196.951.021	-	196.951.021	-	196.951.021
Value adjustment on financial instruments measured at fair value through the revaluation reserve net of deferred taxes	-	-	-238.505.771	-	-238.505.771	-	-238.505.771
Measurement results of cash flow hedges net of deferred taxes	-	-	-791.917	-	-791.917	-	-791.917
Equity method adjustment	-	22.298.674	-7.497.705	-	14.800.969	-	14.800.969
2022 income from sales of variable-income securities	-	-	14.531.312	-	14.531.312	-	14.531.312
Other	-	762.390	-	-	762.390	-2.099.363	-1.336.973
As at 31 December 2022 restated	**173.525.467**	**4.319.474.042**	**765.247.562**	**373.127.192**	**5.631.374.263**	**3.067.932**	**5.634.442.195**

The notes on pages 49 to 194 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
As at 1 January 2023	**173.525.467**	**4.319.474.042**	**765.247.562**	**373.127.192**	**5.631.374.263**	**3.067.932**	**5.634.442.195**
Impact of application of IFRS 9 for insurance entities	-	10.930.840	-	-	10.930.840	-	10.930.840
As at 1 January 2023 restated	**173.525.467**	**4.330.404.882**	**765.247.562**	**373.127.192**	**5.642.305.103**	**3.067.932**	**5.645.373.035**
Appropriation of 2022 income	-	373.127.192	-	-373.127.192	-	-	-
Appropriation of 2022 income from sales of variable-income securities	-	14.531.312	-14.531.312	-	-	-	-
2023 net income	-	-	-	449.283.479	449.283.479	2.116.699	451.388.102
Distribution for FY 2022	-	-60.000.000	-	-	-60.000.000	-	-60.000.000
Actuarial gains/losses relating to employee benefits net of deferred taxes	-	-	-80.423.106	-	-80.423.106	-	-80.423.106
Value adjustment on financial instruments measured at fair value through the revaluation reserve net of deferred taxes	-	-	-133.636.650	-	-133.636.650	-	-133.636.650
Measurement results of cash flow hedges net of deferred taxes	-	-	5.618	-	5.618	-	5.618
Equity method adjustment	-	-4.192.418	21.564.050	-	17.371.632	-	17.371.632
2023 income from sales of variable-income securities	-	-	6.474	-	6.474	-	6.474
Other	-	-63.736	-	-	-63.736	-2.177.686	-2.241.422
As at 31 December 2023	**173.525.467**	**4.653.807.232**	**558.232.636**	**449.271.403**	**5.834.836.738**	**3.006.945**	**5.837.843.683**

Consolidated statement of cash flow as at 31 December 2023

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	31/12/2022	31/12/2023
Cash and cash equivalents		
Cash and sight accounts with central banks	10.848.002.668	7.885.298.645
Loans and advances at amortised cost – Credit institutions	1.436.853.212	2.720.276.016
Loans and advances at amortised cost – Customers	2.016.876.762	820.822.648
Total	**14.301.732.642**	**11.426.397.309**

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	31/12/2022	31/12/2023
	Restated	
CASH POSITION AT 1 JANUARY	**12.263.569.848**	**14.301.732.643**
Income for the year	375.338.710	451.388.102
Non-cash adjustments relating to:		
Net allowances for impairment of credit risks	45.892.748	121.486.311
Allowances for impairment of tangible and intangible assets	43.126.454	46.543.494
Provisions	8.679.916	10.114.684
Unrealised gains/losses	12.039.371	-100.909.424
Share in the profit of equity-accounted associates	-182.490.382	-48.158.925
Other adjustments	-14.881.596	-9.781.140
Changes relating to assets and liabilities from operating activities:		
Financial instruments recognised at fair value	94.235.858	-123.212.929
Loans and advances at amortised cost	-829.857.216	-2.008.917.376
Deposits at amortised cost	2.922.029.178	-1.524.272.746
Issuance of debt securities	-154.346	940.304.518
Other assets and liabilities	-28.050.968	-47.569.320
Total cash flow from operating activities	**2.445.907.727**	**-2.292.984.751**
of which:		
Interest received	*909.493.489*	*2.248.017.080*
Interest paid	*-433.008.188*	*-1.543.481.412*
Income from securities	*35.996.778*	*45.643.138*
Tax on income from continuing operations	*-56.026.836*	*-77.832.202*
Acquisition/disposal of variable-income securities	-	717.726
Acquisition/disposal of investments in associates accounted for using the equity method	-977.892	-2.259.978
Acquisition of fixed-income securities	-2.857.036.320	-4.282.303.810
Disposal/redemption of fixed-income securities	2.207.887.999	3.574.776.168
Acquisitions/disposals of intangible and tangible assets	-33.523.094	-45.352.331
Total cash flow from investment activities	**-683.649.307**	**-754.422.225**
Proceeds from subordinated liabilities	-49.935.000	-
Expenses related to leases	-3.060.553	-3.267.052
Income distribution	-40.000.000	-60.000.000
Total cash flow from financing activities	**-92.995.553**	**-63.267.052**
NET CHANGE IN CASH	**1.669.262.867**	**-3.110.674.028**
Effect of exchange rates on cash and cash equivalents	368.899.928	235.338.694
CASH POSITION AT 31 DECEMBER	**14.301.732.643**	**11.426.397.309**

The notes on pages 49 to 194 are an integral part of these consolidated financial statements

Reconciliation of cash flows from financing activities

in euros	01/01/2022	Movements related to cash flow	Movements unrelated to cash flow	31/12/2022
Proceeds from subordinated liabilities	49.997.126	-49.935.000	-62.126	-

in euros	01/01/2023	Movements related to cash flow	Movements unrelated to cash flow	31/12/2023
Proceeds from subordinated liabilities	-	-	-	-

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 2023

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-1930 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 for financial year 2023 of 1.898 versus 1.865 in 2022.

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

The financial year coincides with the calendar year.

The consolidated financial statements were approved by the Board of Directors meeting on 27 March 2024.

The official version of the consolidated annual financial statements as at 31 December 2023 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 2023 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 2023

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

- The amendments to IAS 12 "Income taxes" regarding the introduction of "International Tax Reform – Pillar Two Model Rules",
- The amendments to IAS 12 "Income taxes" regarding deferred tax related to assets and liabilities arising from a single transaction,
- Disclosure of accounting policies amendments to IAS 1 "Presentation of Financial Statements" and IFRS practice statement 2,
- The amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" regarding the definition of accounting estimates.

The amendments to the following standards and interpretations have an impact on the Spuerkeess group:

- IFRS 17 "Insurance Contracts" as well as its amendments (issued on 25 June 2020) and its amendments regarding initial application of IFRS 17 and IFRS 9 (issued on 9 December 2021) (see point 2.1.5).

2.1.2 New or revised standards adopted by the European Union and not yet applicable as of 1 January 2023

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

- The amendments to IAS 1 "Presentation of Financial Statements" regarding the classification of liabilities as current or non-current liabilities (applicable from 1 January 2024),
- The amendments to IFRS 16 "Leases: Lease Liability in a Sale and Leaseback" (applicable from 1 January 2024).

2.1.3 New or revised standards not yet adopted by the European Union and not yet applicable as of 1 January 2023

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

- The amendments to IAS 7 "Statement of Cash Flows" and to IFRS 7 "Financial Instruments: Disclosures" regarding supplier finance arrangements (applicable from 1 January 2024),
- The amendments to IAS 21 "The Effects of Changes in Foreign Exchange Rates" regarding the lack of exchangeability (applicable from 1 January 2025).

2.1.4 Correction to the presentation pursuant to IAS 8 for financial year 2022

The Group's parent company uses hedge accounting for a portion of its loans and advances to customers at amortised cost. This hedging is carried out with interest rate swap-type derivative instruments included in hedging derivatives on the assets or liabilities side of the balance sheet. The type of hedging used is macro hedging, meaning that a group of loans is hedged by several IRS.

The correction for financial year 2022 relates to the "Change in fair value of a portfolio of financial instruments hedged against interest rate risk" heading which, pursuant to IAS 39, must be presented on the assets side of the balance sheet, since it relates to financial instruments included on the assets side. The correction is only for 2022 and none of the prior periods are affected.

Headings affected by the correction for financial year 2022:

ASSETS in euros	**31/12/2022 before correction**	**correction**	**31/12/2022 after correction**
Loans and advances at amortised cost – Customers	26.705.350.983	-	26.705.350.983
Hedging derivative financial instruments	1.462.544.131	-	1.462.544.131
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-	-752.334.874	-752.334.874
TOTAL ASSETS	**56.833.765.202**	**-752.334.874**	**56.081.430.328**

LIABILITIES in euros	**31/12/2022 before correction**	**correction**	**31/12/2022 after correction**
Hedging derivative financial instruments	307.181.440	-	307.181.440
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	752.334.874	-752.334.874	-
Sub-total of LIABILITIES (before equity capital) to be carried forward	**51.199.323.007**	**-752.334.874**	**50.446.988.133**
TOTAL LIABILITIES, including EQUITY	**56.833.765.202**	**-752.334.874**	**56.081.430.328**

2.1.5 Application of IFRS 9 and IFRS 17 by one of the entities consolidated using the equity method

The Group uses the equity method to consolidate the Lalux Group S.A. entity, which is active in the insurance industry. This entity applied IFRS 9 "Financial Instruments" and IFRS 17 "Insurance Contracts" for the first time on 1 January 2023.

IFRS 17 and its amendments of 25 June 2020 and 9 December 2021 took effect on 1 January 2023. This new standard replaced IFRS 4 "Insurance Contracts" and the main changes concern the accounting for insurance contracts (contracts to be measured using new models), the recognition of certain expenses, and the accounting for mathematical reserves.

Through the amendments to IFRS 17 and IFRS 4 issued by the IASB on 25 June 2020, the IASB allowed eligible entities to defer application of IFRS 9 to the same date that IFRS 17 takes effect. Lalux Group S.A. therefore also applied IFRS 9 as of 1 January 2023.

The impact of applying these standards within the Lalux Group S.A. entity for the purposes of consolidation with the Spuerkeess group was to significantly increase Lalux Group S.A.'s net income and own funds. As this entity is consolidated in the Spuerkeess group's financial statements using the equity method, the value of the Group's share of Lalux Group S.A.'s own funds was therefore revised upwards with retroactive application to 1 January 2022.

The following headings on the Spuerkeess group's balance sheet and income statement changed as at that date:

- "Investments in associates accounted for using the equity method" on the assets side of the balance sheet;
- "Consolidated reserves" and "Income for the year" in equity;
- "Share in the profit of equity-accounted associates" on the income statement.

Summary table of IFRS 9 and IFRS 17 impacts:

	01/01/2022	restatement	01/01/2022 Restated	31/12/2022	restatement	31/12/2022 Restated	FTA IFRS 9	01/01/2023 after FTA
Investments in associates accounted for using the equity method	57.151.557	96.056.782	**153.208.339**	687.778.605	62.848.480	**750.627.085**	10.930.840	**761.557.925**
Consolidated reserves	3.883.953.142	96.056.782	**3.980.009.924**	4.200.838.422	22.578.838	**4.223.417.260**	10.930.840	**4.234.348.100**
of which IFRS 9							*10.930.840*	
of which IFRS 17		*96.056.782*			*22.578.838*			
Share in the profit of equity-accounted associates				142.220.740	40.269.642	**182.490.382**		**182.490.382**
of which IFRS 17					*40.269.642*			

2.2 <u>CONSOLIDATION</u>

2.2.1 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.

2.2.1.1 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	**Activity**	**% of voting rights held**	
		31/12/2022	**31/12/2023**
Lux-Fund Advisory S.A.	Investment advice	89,31	89,15
Spuerkeess 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

2.2.1.2 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	Activity	% of capital held	
		31/12/2022	31/12/2023
Société Nationale de Circulation Automobile S.à r.l.	Automotive services	20,00	20,00
i-Hub S.A.	Financial services	20,00	20,00
Luxair S.A.	Air transport	21,81	21,81
Société de la Bourse de Luxembourg S.A.	Financial services	25,35	25,35
LuxConstellation S.A.	Financial services	-	30,00
Europay Luxembourg S.C.	Financial services	30,10	30,10
LuxHub S.A.	Financial services	32,50	32,50
Visalux S.C.	Financial services	35,36	40,90
Lalux Group S.A.	Insurance	40,00	40,00

The scope of investments in associates has changed since 31 December 2022. In financial year 2023, the Spuerkeess Group acquired a 30% stake in LuxConstellation S.A. and participated in a capital increase for i-Hub S.A.

2.3 <u>Foreign currency transactions</u>

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 EUR 1 is equal to:

Currency	31/12/2022	31/12/2023
CHF	0,9847	0,9272
GBP	0,8866	0,8692
JPY	140,7800	156,8800
SEK	11,1313	11,0822
USD	1,0683	1,1067

2.4 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 Banque centrale du Luxembourg (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 BCL.

3.2 Classification and measurement 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.

If financial assets mandatorily recognised at fair value through profit or loss, financial instruments recognised at amortised cost, or financial instruments recognised at fair value through the revaluation reserve are transferred to "Non-current assets and disposal groups classified as held for sale", these instruments continue to be measured in accordance with the provisions of IFRS 9.

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

In accordance with IFRS 9, the Group continues to apply hedging principles according to IAS 39. 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. 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:

- <u>The fixed-income securities acquired</u> 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".

- <u>Loans granted by the Group</u> 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 working group. 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 working group 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/Risk working groups, the ALM and Risk Management Committees, the Executive Committee, the Audit and Compliance/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 Group's parent company 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.

The Group's parent company's 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 liabilities 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 an adjustment for credit risk specific to the Group's parent company, 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, the Group 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 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. Observable market data include:
  - credit spread curves based on CDS prices;
  - interbank interest rates or swap rates;
  - foreign exchange rates;
  - stock indices;
  - share prices;
  - volatilities (forex, swaptions, caps & floors);
  - counterparty credit spreads;
- non-observable data reflect estimates and internal assumptions relating to the market variations adopted by the Group.

A fair value hierarchy was established according to the type of observable and non-observable data. To determine this hierarchy of fair values, the Group's parent company reviewed all financial instruments measured at fair value to assess the importance of observable data directly or indirectly on the markets:

- 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 directly observable for the financial instruments, such as a price, or indirectly observable, i.e. derived from observable prices, such as implied volatilities of a share derived from observable prices of option contracts on this share. This level includes the majority of over-the-counter derivative financial instruments and structured debt securities issued. These inputs, such as "EURIBOR" yield curves or credit spreads, are initially provided by specialised financial data providers.

- Level 3 fair value: This level includes equity instruments or debt securities for which significant parameters used in the valuation models are based on estimations and internal assumptions. Spuerkeess's shareholdings in unlisted companies are valued twice a year, on 30 June and 31 December. The Group's parent company values each shareholding consistently over time using one of the three eligible approaches, namely the market-based approach, an approach based on income or the net assets approach, or at the level of the discounts applied to determine fair value. Preference is given to the market-based approach for the largest shareholdings. In general:
  - in the event of a transaction (capital increase or sale transaction) during the last 12 months prior to the valuation date or if the parties to a future transaction agree on the price of the transaction, on the valuation date, this transaction price serves as a reference for the valuation price for the position, except for duly justified exceptions;
  - when this concerns a company that holds listed assets, the market price of these assets on the valuation date is used to calculate net asset value;
  - where there has been no transaction during the last 12 months prior to the valuation date, the stock market ratios for a peer group, meaning a sample of listed companies that are comparable to the unlisted company, allows the fair value of the position to be determined. A discount is applied, where applicable, for illiquidity and/or for restrictions on the security, with documentation of the EV/EBITDA, Price-to-Book, Price-to-Sales and Price-to-Earnings ratios for the listed companies in the peer group;
  - the market multiples valuation may be supplemented by multiples based on recent transactions in companies with the same characteristics as the unlisted company held by Spuerkeess, or by a discounted cash flow-type valuation, when the unlisted company regularly draws up a multi-year business plan that is provided to Spuerkeess;
  - when the by-laws of the unlisted company set a transaction price or determine the method used to calculate fair value, the price resulting from the by-laws or from application of the calculation method determine the measurement value of the position on each valuation date;
  - non-material unlisted positions are valued on the basis of net assets after taking into account any discount for illiquidity and/or for restrictions on the security, and/or the company's dividend on income for the last financial year audited, once the information is available.

The data used in the valuation process are derived from the company accounts or are estimated based on the latest figures available. The peer group's market multiples and the accounting data of the companies making up each peer group come from Bloomberg with reference to the closing price for the valuation date, i.e. 30 June or 31 December of the respective year. The process for measuring fair value on the valuation dates is systematically controlled by the first line of defence (data quality) and the second line of defence (methodology, models and accuracy of the first line's work).

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-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 not deteriorated significantly since the loan was granted or the security was purchased ("at inception").

  ⇨ **Value adjustment applied 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 seen a deterioration in their probability of default (PD). The approach based on a deterioration in PD, which takes greater account of the forward-looking aspect, replaces the method based on ratings downgrades[1]. This deterioration is now based on a comparison (absolute and relative) of the residual lifetime probabilities of default (annualised) on the reference date compared with the origination date. A threshold of 0,3% is applied for the low credit risk exemption (LCRE):

    $\boxed{\begin{array}{l} PD_{Reporting} - PD_{Origination} > \text{absolute threshold} \\ \text{or} \\ PD_{Reporting} / PD_{Origination} > \text{relative threshold} \end{array}}$ **and** Low Credit Risk Exemption (LCRE) $\boxed{PD_{Reporting} > PD_{LCRE}}$ **then** $\boxed{\text{Stage 2}}$

    With:
    - PD threshold to define the LCRE: 0,3%;

[1] Internal rating downgraded by ≥ 3 notches (≥ 2 notches for exposures to individuals) since initial recognition.

- choice of relative threshold: threshold of "x 3" compared with PD at origination;
- choice of absolute threshold: 5%.

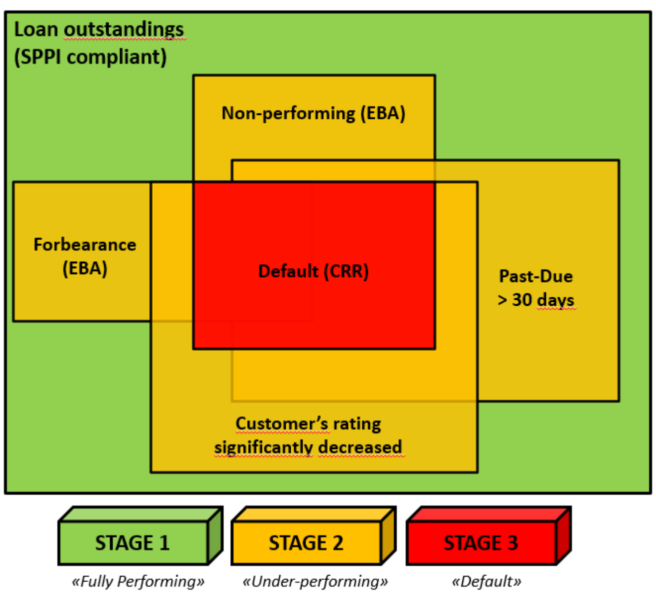
- are "non-performing" but not in default under Article 178 of the CRR;
- are past due for 30 days but less than 90 days;
- have been restructured according to the definition introduced by the European Banking Authority (EBA) and adopted by the European Union in Regulation (EU) 2015/227;
- are manually assigned to Stage 2 to account for qualitative criteria not considered in the previous points;

⇨ **Value adjustment applied is equal to a lifetime expected credit loss.**

- Stage 3 includes exposures in default according to Article 178 of the CRR.

⇨ **Value adjustment applied is equal to a lifetime expected credit loss (with probability of default = 1)**

The chart below details 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).	STAGE 3
	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 borrower on the Bank's balance sheet > 1% (retail and wholesale).	
2. “Non-Performing”	Late > ½ monthly instalment for > 90 days, or	STAGE 2
	Overdraft > EUR 100 for 90 days.	
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) and customer in financial difficulty.	STAGE 2
4. “Past-Due”	Late payment > 30 days with certain materiality thresholds (EBA notion).	STAGE 2
5. Internal rating	Deterioration in PD between its origination date and its 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 customer moves from Stage 3 to Stage 2 (in the event of SICR)
	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) The 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 four economic scenarios:

- optimistic,
- baseline,
- adverse, and
- severely adverse.

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 respective macroeconomic scenario. The change in the price index has a direct impact on the haircut calculation. A portion of these haircuts also relates to the cost of realising the collateral when there is recovery (haircuts of 25%)[2]. Note, however, that any increase in prices is neutralised (i.e. management overlay), regardless of the scenario or the year. This type of management overlay was already applied in 2022.

The model used to revalue residential properties utilises energy performance class as the model's explanatory variable. Based on historical price observations, the revaluation model applies a more favourable price indexation for properties with a more efficient energy class. Climate risk (transition risk) can therefore be considered when determining LGDs and provisions. For now, the real estate price scenario does not yet differentiate between energy classes. This aspect is, however, expected to be considered in the change in real estate prices for 2024. Exposure to physical risk (i.e. flood risk) is accounted for in the initial valuation of the property, but in general remains insignificant at the portfolio level. Only 2,1% of residential properties with a mortgage are in a 100-year floodplain[3] (average probability of a flood occurring).

Spuerkeess uses scenarios that are weighted as follows:

	Scenario weighting			
	Baseline	Adverse	Severely adverse	Optimistic
2022	50%	25%	20%	5%
2023	60%	20%	10%	10%

Given that the severely adverse scenario is more severe than it was in 2022, the weighting of the severely adverse macroeconomic scenario declined from 20% to 10% in 2023.

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, with the ECB's forecasts used as the adjustment factor. In addition, these projections are adjusted using expert judgement to account for post-publication developments (see baseline scenario below) or supplemented with internal scenarios (see adverse and severely adverse scenarios below).

[2] In the adverse scenario, a 47,5% haircut is applied, which corresponds to the 40% applied in the baseline scenario plus 7,5%, in line with the additional decline in prices between 2024 and 2026 projected in this scenario. In the severely adverse scenario, we apply a 60% haircut (i.e. 40% from the baseline scenario plus 20% to account for an additional price decline in this scenario). The optimistic scenario applies a 32,5% haircut to account for the 40% applied in the baseline scenario and a smaller decline in prices than is anticipated in this baseline scenario.

[3] The floodplain maps developed by the Ministry of the Environment, Climate and Development as part of its flood risk management plans for the Grand Duchy of Luxembourg were used for this flood risk analysis.

The baseline scenario was defined using the IMF's July 2023 projections for advanced economies. It therefore uses 1,4% growth for advanced economies for 2024. STATEC's forecasts from mid-September 2023 were used for Luxembourg GDP (i.e. +2%, +2,5% and +2,4% for 2024, 2025 and 2026, respectively).

The macroeconomic context in the adverse scenario is based on the plausible adverse risks in the core scenario anticipated by the IMF in its July 2023 World Economic Outlook (WEO), supplemented by expert opinions (impact of central bank actions to stabilise the economy, the Luxembourg government's response to a sharper decline in real estate prices[4]). This macroeconomic scenario assumes that inflation will rise at the end of 2023 and be more persistent than expected, and that economic activity will gradually slow in Q4 2023.

The severely adverse scenario defined by Spuerkeess (expert judgement) presents a more unfavourable macroeconomic scenario than the adverse macroeconomic scenario. The severely adverse scenario projects, among others, an aggregate 7,3% decline in GDP over three years for advanced economies (including the United States, which is expected to have a smaller decline than the EU), along with a significant decrease in EU State revenues. In this scenario, Luxembourg is not immune to the severely adverse environment and, as a result, GDP declines by 4,5% over the three years in the projection scenario.

The results were reviewed and validated by the appropriate Spuerkeess bodies.

[4] The IMF's October 2023 publication was not taken into account, as there were no material changes versus the July publication (see chart at the end of this section).

- ECLs and sensitivity scenarios at 31/12/2022:

Type of scenario	Weighting	Macroeconomic variables	2023	2024	2025	Unweighted ECLs (in EURm)	Weighted ECLs (in EURm)
Optimistic	5%	Luxembourg GDP	3,50%	3,00%	3,00%	121	194
		Advanced economies GDP	2,30%	3,00%	3,00%		
Baseline	50%	Luxembourg GDP	2,50%	2,40%	2,10%	136	
		Advanced economies GDP	0,90%	1,50%	1,50%		
Adverse	25%	Luxembourg GDP	-0,45%	0,50%	0,50%	235	
		Advanced economies GDP	-0,50%	0,30%	0,30%		
Severely adverse	20%	Luxembourg GDP	-2,45%	-0,50%	1,50%	303	
		Advanced economies GDP	-1,50%	-0,20%	1,00%		

- ECLs and sensitivity scenarios at 31/12/2023:

Type of scenario	Weighting	Macroeconomic variables	2024	2025	2026	Unweighted ECLs (in EURm)	Weighted ECLs (in EURm)
Optimistic	10%	Luxembourg GDP	2,40%	2,70%	2,50%	216	326
		Advanced economies GDP	1,80%	2,00%	2,00%		
Baseline	60%	Luxembourg GDP	2,00%	2,50%	2,40%	265	
		Advanced economies GDP	1,40%	1,80%	1,90%		
Adverse	20%	Luxembourg GDP	0,60%	1,10%	1,50%	371	
		Advanced economies GDP	1,00%	1,40%	1,50%		
Severely adverse	10%	Luxembourg GDP	-3,00%	-1,00%	-0,50%	719	
		Advanced economies GDP	-4,00%	-3,00%	-0,50%		

In the current adverse economic environment (high interest rates and slowing economic growth), Spuerkeess continues to make model adjustments in the form of management overlays in its IFRS 9 models.

Spuerkeess used a management overlay via the weightings of the four scenarios. Under the existing procedure, the weighting of the scenarios should have been calculated based on a quantitative[5] and qualitative[6] analysis. To address the uncertainties related to the macroeconomic environment, Spuerkeess therefore decided to override this approach, given the quantitative component's excessively backward-looking approach. The quantitative/qualitative approach before management overlay (70% baseline, 10% optimistic, and 20% for the two adverse and severely adverse scenarios) is therefore replaced by expert judgements based more on qualitative weightings, defined in the scenario weighting table.

In 2022, Spuerkeess had already downgraded Retail customers (i.e. individuals and small enterprises) classified as "high risk" by two whole letter rating notches. Given the current context, Spuerkeess has taken the following approach:

[5] In the quantitative approach, the historical frequency of macroeconomic crises is used to determine the weightings. The weightings for the quantitative approach are: optimistic: 14,9%; adverse: 21,3%; baseline: 63,8%.
[6] Qualitative approach based on an analytical report by a leading European asset manager.

- medium-sized enterprises active in a "high risk" sector are now downgraded by two notches (versus one notch previously);
- downgrades of individuals and small enterprises remain unchanged, i.e.:
  - individuals with a significant deterioration in repayment ability due to rising interest rates: +2 notches on a 12-grade scale;
  - small enterprises active in a "high risk" sector: +2 whole letter rating notches.

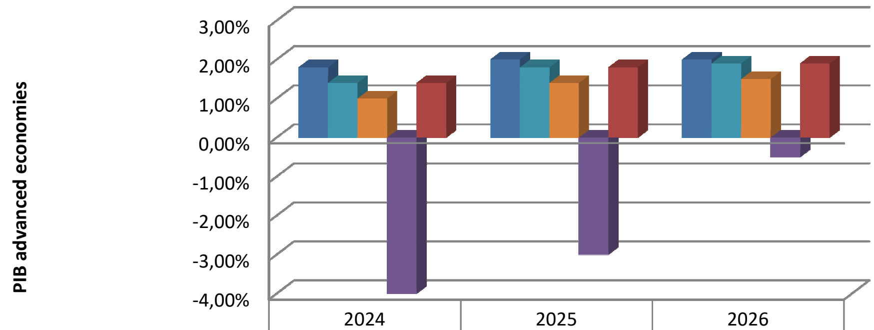
The sector risk classification is based on Spuerkeess's integrated strategy, which aims to assess each sector's risk in a given macroeconomic environment, such as how much energy the sector consumes. Each sector's climate and environmental risks (transition risk) are also taken into consideration in this integrated strategy. For corporates, transition-related climate risk is thus factored into the ECL calculation through the risk classification and the resulting management overlays.

Neither the 5% rise in real estate prices anticipated in the baseline scenario for 2026 nor the 10% aggregate rise (2025 and 2026) in the optimistic scenario has been considered in the ECL calculation. An additional management overlay therefore consists of not accounting for the increase in real estate prices in the baseline and optimistic macroeconomic scenarios when calculating LTVs and consequently LGDs. Factoring in the higher prices projected would have led to lower LGDs.

The level of provisions at 31 December 2023 of EUR 326 million includes EUR 42,7 million in management overlays (versus EUR 51 million in December 2022), of which EUR 10,7 million relates to the scenario weightings, EUR 26,7 million to rating downgrades and EUR 5,3 million to not accounting for higher real estate prices. The use of the new staging method based on PD instead of ratings caused provisions to increase by EUR 5 million.

The tables below compare the internal scenarios used with the IMF's and STATEC's baseline scenarios. For Luxembourg GDP, Spuerkeess's less favourable baseline scenario than STATEC's (2% vs 2,5%) reflects the inclusion of the downward revision to Luxembourg GDP figures compared with STATEC's forecasts at end-September 2023.

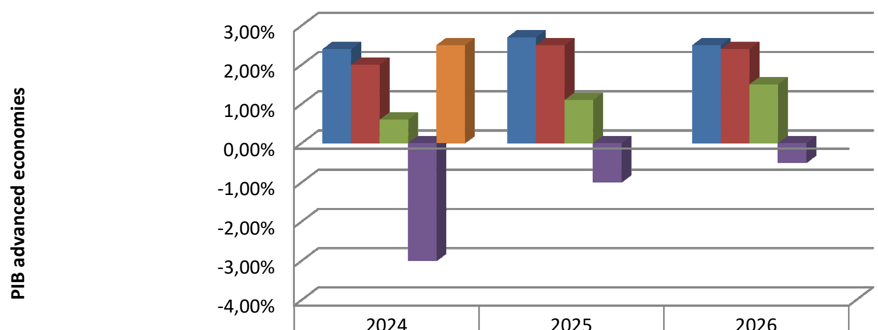
GDP scenarios Spuerkeess and external (IMF) Advanced Economies at 31/12/2023



	2024	2025	2026
GDP - Optimistic - Spuerkeess	1,80%	2,00%	2,00%
GDP - Baseline - Spuerkeess	1,40%	1,80%	1,90%
GDP - Adverse - Spuerkeess	1,00%	1,40%	1,50%
GDP - Severely Adverse - Spuerkeess	-4,00%	-3,00%	-0,50%
GDP - Baseline - IMF 2023/10	1,40%	1,80%	1,90%

Comparison of scenarios used at 31/12/2023 (Advanced Economies)

GDP scenarios Spuerkeess and external (STATEC) Luxembourg at 31/12/2023



	2024	2025	2026
GDP - Optimistic - Spuerkeess	2,40%	2,70%	2,50%
GDP - Baseline - Spuerkeess	2,00%	2,50%	2,40%
GDP - Adverse - Spuerkeess	0,60%	1,10%	1,50%
GDP - Severely Adverse - Spuerkeess	-3,00%	-1,00%	-0,50%
GDP - Baseline - STATEC 2023/12	2,50%		

Comparison of scenarios used at 31/12/2023 (Luxembourg)[7].

[7] STATEC data not available for 2025 and 2026.

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 the Group's parent company's Executive Committee based on its documented 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 Sector-based analysis

The Group's parent company categorises its national and international corporate 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). In the third quarter of 2022, an integrated approach covering the credit risk, ESG and specific vulnerability components replaced the previous concept of Covid-19 vulnerability. Each sub-industry is assigned a low, medium or high vulnerability.

Specific vulnerabilities refer to factors such as risks related to the Russia-Ukraine conflict, inflation and the shortage of certain commodities having a significant impact on certain sub-industries. The positive and negative effects of specific opportunities and vulnerabilities may influence the final sector view. Where applicable, counterparties that operate in a sub-industry classified as vulnerable are subject to enhanced monitoring. Sub-industry vulnerability is incorporated into the calculation of sector-based credit limits and internal ratings and will ultimately have a direct impact on how the capital charge and exposure provisioning are determined.

The rapid change in key risk factors, such as inflation, interest rates, economic uncertainty and consumers' loss of purchasing power, led the Group's parent company to revise the vulnerabilities in July 2023 compared with those used in November 2022.

The Group's parent company thus revised the internal rating for various business exposures to give priority to sectors categorised as high risk under the new approach and account for the importance of the borrowers for the national economy and the extent of their commitments to the Group's parent company. Sector risk was also taken into account when assigning ratings to the customers in question.

Ratings were downgraded at 31 December 2023 versus December 2022 for 24,5% of customers active in the sectors most affected by the new integrated approach, confirmed for 52,2%, upgraded for 16,3% and left unchanged for 1,9% of these customers. For 5,1% of new customers, the impact was considered when assigning the initial rating and in any reviews conducted during the year.

Sectors currently classified as high risk mainly include companies active in the following areas:

- real estate operating companies;
- diversified real estate activities;
- real estate development;
- homebuilding;
- automotive retail.

At 31 December 2023, the combined exposures of professional customers classified as high risk represented EUR 5.540 million in outstandings (EUR 3.141 million at 31 December 2022 based on vulnerabilities applicable on that date) and the related expected credit losses recorded stood at EUR 121,9 million. The breakdown of provisions by IFRS stage is as follows:

- 19,1% of impairments come from stage 1 (39,3% at 31 December 2022);
- 27,0% of impairments come from stage 2 (52,0% at 31 December 2022);
- 53,9% of impairments come from stage 3 (8,7% at 31 December 2022).

The Group's parent company also pays close attention to the commitments of customers indirectly affected by the high-risk sectors.

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

3.4.1 Repurchases and reverse repurchases

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

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

By analogy, securities purchased subject to resale agreements (reverse repo) relating to the same or 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 <u>Interbank market</u>

3.5.1 Borrowings

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

3.5.2 Issuance of debt securities

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

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

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

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 to EUR 20.000. In addition, the Law requires that deposits arising from specific transactions, fulfilling a social objective, or relating to particular life events be covered above the limit of EUR 100.000 for a 12-month period.

The 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 from 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.

At the end of 2023, the amount of financial resources of the "Fonds de résolution Luxembourg" (FRL, Luxembourg resolution fund) exceeded the volume of 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. As a result, credit institutions will not be required to make any additional contributions in 2024.

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

3.12 Deferred taxes

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

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

Deferred tax assets are recognised to the extent that it is probable that the entity will recover the asset within a given timeframe. 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*	31/12/2022	31/12/2023
Cash	75.845.803	79.367.153
Deposits with central banks	9.795.349.796	7.073.199.664
Other deposits at sight	976.570.100	735.210.731
Total	**10.847.765.699**	**7.887.777.548**
of which impairment of financial assets	*-1.496.616*	*-651.509*

* term of less than one year

Changes in impairments:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2022	**1.161.034**	**-**	**-**	**1.161.034**
Changes	**335.583**	**-**	**-**	**335.583**
Increase due to acquisition and origination	28	-	-	28
Decrease due to repayment	-100	-	-	-100
Change related to credit risk	-97.295	-	-	-97.295
Other changes	423.228	-	-	423.228
Depreciation	-	-	-	-
Exchange gain or loss	9.721	-	-	9.721
Position as at 31 December 2022	**1.496.616**	**-**	**-**	**1.496.616**

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

Impaired loans as at 31 December 2022	Stage 1	Stage 2	Stage 3	Total
Outstanding	10.849.262.315	-	-	10.849.262.315

[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.

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2023	**1.496.616**	**-**	**-**	**1.496.616**
Changes	**-856.334**	**11.227**	**-**	**-845.107**
Increase due to acquisition and origination	4.858	-	-	4.858
Decrease due to repayment	-22.628	-	-	-22.628
Change related to credit risk	-840.132	11.227	-	-828.905
Other changes	4.441	-	-	4.441
Depreciation	-	-	-	-
Exchange gain or loss	-2.873	-	-	-2.873
Position as at 31 December 2023	**640.282**	**11.227**	**-**	**651.509**

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

Impaired loans as at 31 December 2023	Stage 1	Stage 2	Stage 3	Total
Outstanding	7.884.925.937	3.503.120	-	7.888.429.057

4.2 Loans and advances at amortised cost – Credit institutions

Headings		31/12/2022			31/12/2023	
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Interbank loans	1.128.198.657	70.806.606	1.199.005.263	559.277.084	5.607.053	564.884.137
Reverse repurchase/Repurchase agreements	198.438.996	36.968.560	235.407.555	2.535.341.720	75.256.466	2.610.598.186
Finance leases	144	99.392	99.536	21.884	45.236	67.119
Other	23.485.651	-	23.485.651	69.121.345	-	69.121.345
Total	**1.350.123.447**	**107.874.557**	**1.457.998.005**	**3.163.762.033**	**80.908.755**	**3.244.670.787**
of which impairment of financial assets	*-511.347*	*-69.566*	*-580.913*	*-35.088*	*-887*	*-35.975*
Undrawn confirmed credits			233.202.789			257.908.123

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 2023 and 2022, the Group's parent company reused securities from reverse repurchase transactions.

Changes in impairments:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2022	**541.222**	**5**	**-**	**541.227**
Changes	**39.654**	**33**	**-**	**39.687**
Increase due to acquisition and origination	454.160	-	-	454.160
Decrease due to repayment	-12.299	-	-	-12.299
Change related to credit risk	-634.341	7	-	-634.334
Other changes	229.465	26	-	229.491
Depreciation	-	-	-	-
Exchange gain or loss	2.669	-	-	2.669
Position as at 31 December 2022	**580.875**	**39**	**-**	**580.913**

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

Impaired loans as at 31 December 2022	Stage 1	Stage 2	Stage 3	Total
Outstanding	1.458.577.330	1.588	-	1.458.578.918

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2023	**580.875**	**39**	**-**	**580.913**
Changes	**-544.919**	**-20**	**-**	**-544.939**
Increase due to acquisition and origination	52.338	-	-	52.338
Decrease due to repayment	-14.850	-5	-	-14.855
Change related to credit risk	-597.216	-15	-	-597.231
Other changes	14.493	-	-	14.493
Depreciation	-	-	-	-
Exchange gain or loss	316	-	-	316
Position as at 31 December 2023	**35.957**	**19**	**-**	**35.975**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	290	-290	-	-
Transfer from Stage 2	-3.827	3.827	-	-
Transfer from Stage 3	-	-	-	-

Impaired loans as at 31 December 2023	Stage 1	Stage 2	Stage 3	Total
Outstanding	3.244.701.457	5.305	-	3.244.706.762

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	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Retail customers	1.041.487.150	18.441.473.382	19.482.960.533	974.141.870	18.288.643.764	19.262.785.634
Corporate customers	1.900.975.976	4.019.946.798	5.920.922.773	2.242.354.736	4.108.770.407	6.351.125.143
Public Sector	109.935.904	1.191.539.613	1.301.475.517	621.038.588	732.738.576	1.353.777.164
Total	**3.052.399.030**	**23.652.959.793**	**26.705.358.823**	**3.837.535.194**	**23.130.152.747**	**26.967.687.941**
of which finance leases	*13.483.068*	*150.921.084*	*164.404.152*	*11.897.308*	*189.132.655*	*201.029.963*
of which impairment of financial assets	*-41.434.981*	*-113.967.586*	*-155.402.568*	*-86.363.405*	*-191.165.805*	*-277.529.210*
Undrawn confirmed credits			6.178.159.623			6.098.357.246

Impairment of loans and advances – Customers

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2022	**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*
Changes	**11.733.314**	**25.812.023**	**5.234.166**	**42.779.504**
Increase due to acquisition and origination	12.610.946	2.432.895	642.824	15.686.665
Decrease due to repayment	-524.427	-4.952.445	-267.369	-5.744.241
Change related to credit risk	-9.863.938	22.229.447	5.867.668	18.233.178
Other changes	9.499.754	6.100.342	62.981	15.663.076
Depreciation	-	-	-968.854	-968.854
Exchange gain or loss	10.980	1.784	-103.084	-90.320
Position as at 31 December 2022	**41.505.665**	**59.814.513**	**54.082.390**	**155.402.568**
of which:				
Retail customers	*11.597.338*	*26.393.141*	*15.985.185*	*53.975.664*
Corporate customers	*29.849.764*	*33.312.073*	*38.097.205*	*101.259.041*
Public Sector	*58.564*	*109.299*	-	*167.863*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Retail customers	**72.067.532**	**-95.527.611**	**23.460.079**	**-**
Transfer from Stage 1	*-813.286.710*	*798.964.551*	*14.322.159*	-
Transfer from Stage 2	*883.065.374*	*-904.363.009*	*21.297.635*	-
Transfer from Stage 3	*2.288.868*	*9.870.847*	*-12.159.715*	-
Corporate customers	**-546.835.778**	**542.410.435**	**4.425.343**	**-**
Transfer from Stage 1	*-616.455.187*	*595.607.249*	*20.847.938*	-
Transfer from Stage 2	*67.561.340*	*-88.023.402*	*20.462.062*	-
Transfer from Stage 3	*2.058.069*	*34.826.588*	*-36.884.657*	-
Public Sector	**-5.174.638**	**5.174.638**	**-**	**-**
Transfer from Stage 1	*-5.174.638*	*5.174.638*	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-

Impaired loans as at 31 December 2022	Stage 1	Stage 2	Stage 3	Total
Retail customers	18.074.209.654	1.366.819.539	95.907.003	19.536.936.197
Corporate customers	4.877.594.195	1.023.308.159	121.279.460	6.022.181.814
Public Sector	1.296.468.741	5.174.638	-	1.301.643.380

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2023	**41.505.665**	**59.814.513**	**54.082.390**	**155.402.568**
of which:				
Retail customers	*11.597.338*	*26.393.141*	*15.985.185*	*53.975.664*
Corporate customers	*29.849.764*	*33.312.073*	*38.097.205*	*101.259.041*
Public Sector	*58.564*	*109.299*	*-*	*167.863*
Changes	**1.863.369**	**24.395.489**	**95.867.784**	**122.126.642**
Increase due to acquisition and origination	16.823.766	2.496.293	5.285.185	24.605.182
Decrease due to repayment	-1.349.922	-1.094.964	-535.014	-2.979.900
Change related to credit risk	-21.869.766	26.566.955	87.761.274	92.458.463
Other changes	8.262.695	-3.567.227	4.514.365	9.209.832
Depreciation	-	-2.228	-1.050.728	-1.052.956
Exchange gain or loss	-3.404	-3.339	-107.235	-113.978
Position as at 31 December 2023	**43.369.034**	**84.210.002**	**149.950.174**	**277.529.210**
of which:				
Retail customers	*12.319.570*	*44.387.431*	*53.089.560*	*109.796.561*
Corporate customers	*30.567.614*	*39.753.172*	*96.860.614*	*167.181.400*
Public Sector	*481.850*	*69.399*	*-*	*551.249*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Retail customers	**-776.810.573**	**612.271.245**	**164.539.328**	**-**
Transfer from Stage 1	*-1.268.020.771*	*1.158.736.438*	*109.284.333*	-
Transfer from Stage 2	*488.744.770*	*-563.525.855*	*74.781.085*	-
Transfer from Stage 3	*2.465.428*	*17.060.662*	*-19.526.090*	-
Corporate customers	**-460.948.811**	**293.379.429**	**167.569.382**	**-**
Transfer from Stage 1	*-686.370.144*	*601.625.926*	*84.744.218*	-
Transfer from Stage 2	*223.596.923*	*-309.849.177*	*86.252.254*	-
Transfer from Stage 3	*1.824.410*	*1.602.680*	*-3.427.090*	-
Public Sector	**3.271.977**	**-3.271.977**	**-**	**-**
Transfer from Stage 1	*-1.561.051*	*1.561.051*	-	-
Transfer from Stage 2	*4.833.028*	*-4.833.028*	-	-
Transfer from Stage 3	-	-	-	-

Impaired loans as at 31 December 2023	Stage 1	Stage 2	Stage 3	Total
Retail customers	17.168.139.432	1.947.370.702	257.072.061	19.372.582.195
Corporate customers	4.981.458.985	1.242.032.566	294.814.993	6.518.306.544
Public Sector	1.323.902.253	30.426.160	-	1.354.328.413

"Other changes" in the previous tables reflect changes in methodology.

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.

As at 31/12/2022	Performing restructured loans		Non-performing restructured loans		Total restructured loans	
	Outstanding	Impairment	Outstanding	Impairment	Outstanding	Impairment
Retail customers	107.555.057	1.304.243	27.642.743	2.244.345	135.197.801	3.548.588
Corporate customers	132.746.295	3.566.522	65.575.310	11.545.505	198.321.605	15.112.027
Total	**240.301.352**	**4.870.765**	**93.218.053**	**13.789.849**	**333.519.406**	**18.660.614**

As at 31/12/2023	Performing restructured loans		Non-performing restructured loans		Total restructured loans	
	Outstanding	Impairment	Outstanding	Impairment	Outstanding	Impairment
Retail customers	331.243.777	4.029.419	105.974.061	20.673.163	437.217.838	24.702.582
Corporate customers	121.629.665	2.829.805	153.277.729	44.759.609	274.907.394	47.589.413
Total	**452.873.442**	**6.859.224**	**259.251.790**	**65.432.771**	**712.125.233**	**72.291.995**

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

Assets	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Non-derivative financial instruments	-	-	-	-	-	-
Derivative financial instruments (note 4.12.)	75.175.729	56.900.000	132.075.729	131.477.857	46.559.933	178.037.790
Total	**75.175.729**	**56.900.000**	**132.075.729**	**131.477.857**	**46.559.933**	**178.037.790**

Liabilities	31/12/2022			31/12/2023		
Non-derivative financial instruments	-	-	-	-	-	-
Derivative financial instruments (note 4.12.)	222.949.082	71.916.098	294.865.180	243.373.036	41.820.715	285.193.752
Total	**222.949.082**	**71.916.098**	**294.865.180**	**243.373.036**	**41.820.715**	**285.193.752**

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

Headings	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Debt instruments	**200.975.660**	**260.929.883**	**461.905.543**	**234.635.716**	**152.137.959**	**386.773.675**
Public Sector	*89.697.959*	*43.949.818*	*133.647.777*	*20.248.655*	*23.876.499*	*44.125.154*
Credit institutions	*12.399.214*	*197.291.155*	*209.690.369*	*122.441.489*	*108.321.101*	*230.762.590*
Corporate customers	*98.878.488*	*19.688.909*	*118.567.396*	*91.945.573*	*19.940.359*	*111.885.932*
Loans and advances	**-**	**28.781.367**	**28.781.367**	**2.033.436**	**42.068.726**	**44.102.162**
Public Sector	-	-	-	-	-	-
Credit institutions	-	-	-	-	-	-
Corporate customers	-	*28.781.367*	*28.781.367*	*2.033.436*	*42.068.726*	*44.102.162*
Total	**200.975.660**	**289.711.249**	**490.686.910**	**236.669.152**	**194.206.685**	**430.875.837**
of which unrealised valuation	*-3.037.849*	*-21.804.478*	*-24.842.327*	*-1.199.628*	*-11.827.835*	*-13.027.463*

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	2022	2023
Position as at 1 January	**602.794.611**	**461.905.543**
Acquisitions	8.438.647	40.455.774
Sales	-239.181	-
Repayments	-117.264.577	-143.460.752
Realised profit/(loss)	-2.835.380	-1.952.946
Pro-rata interest	-676.965	6.953.295
Unrealised valuations	-28.333.435	22.809.973
Exchange gain or loss	21.823	62.787
Position as at 31 December	**461.905.543**	**386.773.675**

4.6 Fixed-income securities recognised at amortised cost

Headings	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Debt instruments						
Public Sector	600.847.047	2.177.272.393	2.778.119.441	421.052.487	2.283.870.843	2.704.923.331
Credit institutions	2.006.601.728	3.930.655.142	5.937.256.870	2.061.102.996	4.361.861.431	6.422.964.427
Corporate customers	739.306.751	4.131.524.920	4.870.831.671	599.137.672	5.104.099.995	5.703.237.667
Total	**3.346.755.527**	**10.239.452.455**	**13.586.207.982**	**3.081.293.155**	**11.749.832.269**	**14.831.125.424**
of which unrealised valuation (interest-rate component) for the purposes of hedge accounting	*-21.631.992*	*-777.107.454*	*-798.739.447*	*-19.603.091*	*-313.749.407*	*-333.352.498*
of which impairment of financial assets	*-1.781.357*	*-9.043.585*	*-10.824.942*	*-1.025.748*	*-9.345.013*	*-10.370.761*

Breakdown of changes in carrying amount:

Debt instruments	2022	2023
Position as at 1 January	**13.821.928.357**	**13.586.207.982**
Acquisitions	2.781.599.281	4.308.649.721
Sales	-	-
Repayments	-2.177.642.987	-3.514.553.275
Realised profit/(loss)	67.364	-1.121.257
Pro-rata interest	-34.758.507	58.205.092
Unrealised valuations of hedges	-852.173.018	466.508.205
Impairment	-1.724.752	454.181
Exchange gain or loss	48.912.244	-73.225.225
Position as at 31 December	**13.586.207.982**	**14.831.125.424**

Table detailing the provisioning:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2022	**8.401.338**	**495.556**	**203.296**	**9.100.190**
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*
Changes	**1.810.353**	**-86.439**	**838**	**1.724.752**
Increase due to acquisition and origination	2.214.346	-	-	2.214.346
Decrease due to repayment	-81.861	-747	-	-82.609
Change related to credit risk	-3.039.460	-189.638	838	-3.228.260
Other net changes	2.697.345	103.946	-	2.801.292
Depreciation	-	-	-	-
Exchange gain or loss	19.983	-	-	19.983
Position as at 31 December 2022	**10.211.691**	**409.117**	**204.134**	**10.824.942**
of which				
Public Sector	*1.011.249*	*-*	*-*	*1.011.249*
Credit institutions	*4.947.711*	*-*	*-*	*4.947.711*
Corporate customers	*4.252.731*	*409.117*	*204.134*	*4.865.982*

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Public Sector	**-**	**-**	**-**	**-**
Credit institutions	**-**	**-**	**-**	**-**
Corporate customers	**-21.718.772**	**21.718.772**	**-**	**-**
Transfer from Stage 1	-24.564.836	24.564.836	-	-
Transfer from Stage 2	*2.846.063*	*-2.846.063*	-	-
Transfer from Stage 3	-	-	-	-

Impaired loans as at 31 December 2022	Stage 1	Stage 2	Stage 3	Total
Public Sector	2.779.130.689	-	-	2.779.130.689
Credit institutions	5.942.204.581	-	-	5.942.204.581
Corporate customers	4.820.997.379	54.496.140	204.134	4.875.697.653

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2023	**10.211.691**	**409.117**	**204.134**	**10.824.942**
of which:				
Public Sector	*1.011.249*	*-*	*-*	*1.011.249*
Credit institutions	*4.947.711*	*-*	*-*	*4.947.711*
Corporate customers	*4.252.731*	*409.117*	*204.134*	*4.865.982*
Changes	**-407.450**	**6.806**	**-53.536**	**-454.181**
Increase due to acquisition and origination	2.552.928	35.772	150.598	2.739.298
Decrease due to repayment	-152.602	-1.989	-	-154.591
Change related to credit risk	-7.703.414	-26.651	-204.134	-7.934.200
Other net changes	4.911.033	-	-	4.911.033
Depreciation	-	-	-	-
Exchange gain or loss	-15.395	-326	-	-15.721
Position as at 31 December 2023	**9.804.240**	**415.923**	**150.598**	**10.370.761**
of which				
Public Sector	*3.998.994*	*-*	*-*	*3.998.994*
Credit institutions	*2.943.098*	*11.729*	*-*	*2.954.828*
Corporate customers	*2.862.148*	*404.194*	*150.598*	*3.416.940*

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	**-2.875.186**	**2.875.186**	**-**	**-**
Transfer from Stage 1	-2.875.186	2.875.186	-	-
Transfer from Stage 2	-	-	-	-
Transfer from Stage 3	-	-	-	-
Corporate customers	**-33.517.569**	**33.517.569**	**-**	**-**
Transfer from Stage 1	*-46.648.544*	*46.648.544*	-	-
Transfer from Stage 2	*13.130.975*	*-13.130.975*	-	-
Transfer from Stage 3	-	-	-	-

Impaired loans as at 31 December 2023	Stage 1	Stage 2	Stage 3	Total
Public Sector	2.708.922.324	-	-	2.708.922.324
Credit institutions	6.423.044.069	2.875.186	-	6.425.919.255
Corporate customers	5.590.567.660	115.859.903	227.044	5.706.654.606

"Other net changes" in the previous tables reflect changes in methodology.

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

This item includes debt instruments in the form of floating 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		31/12/2022			31/12/2023	
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Debt instruments						
Public Sector	-	25.146.780	25.146.780	-	26.417.285	26.417.285
Credit institutions	-	4.479.600	4.479.600	-	4.674.550	4.674.550
Corporate customers	-	-	-	-	-	-
Total	**-**	**29.626.380**	**29.626.380**	**-**	**31.091.835**	**31.091.835**
of which unrealised valuation at the reporting date	-	*-3.947.350*	*-3.947.350*	-	*-2.481.984*	*-2.481.984*

The amount shown in equity items for unrealised valuation is net of taxes and comes to -EUR 1.842.641 for financial year 2023 and -EUR 2.956.580 for the previous financial year.

Breakdown of changes in carrying amount:

Debt instruments	2022	2023
Position as at 1 January	**17.534.900**	**29.626.380**
Acquisitions	15.948.070	-
Realised profit/(loss)	-1.944	-
Pro-rata interest	110.964	89
Unrealised valuations	-3.965.610	1.465.366
Position as at 31 December	**29.626.380**	**31.091.835**

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

Headings	31/12/2022	31/12/2023
Equity instruments		
Credit institutions	7.894.054	8.025.523
Corporate customers	884.773.675	747.046.768
Total	**892.667.729**	**755.072.291**
of which unrealised valuation through the revaluation reserve	*606.425.744*	*471.330.066*
Dividends received during the period	35.333.027	44.437.715
of which dividends from positions sold during the period	-	-
Gains/losses on sales in equity	-101	-241.250

The amount shown in equity items in relation to the unrealised valuation of variable-income securities recognised at fair value through the revaluation reserve is net of taxes and comes to EUR 474.487.166 for financial year 2023 and EUR 609.237.755 for the previous financial year.

Breakdown of changes in carrying amount:

Equity instruments	2022	2023
Position as at 1 January	**1.125.045.988**	**892.667.729**
Acquisitions	-	-
Sales	-26.416	-520.671
Transfers to non-current assets and disposal groups classified as held for sale	-	-221.832
Profit/(loss) realised through own funds	-101	-241.250
Unrealised valuations	-235.249.530	-134.854.430
Exchange gain or loss	2.897.789	-1.757.255
Position as at 31 December	**892.667.729**	**755.072.291**

4.9 Investments in associates accounted for using the equity method

	31/12/2022	31/12/2023
Acquisition value on 1 January	**60.657.983**	**61.635.875**
Establishment	6.630.000	2.259.977
Disposals	-5.652.108	-
Total (as acquisition value)	**61.635.875**	**63.895.852**

List of associates:

Associates	Fraction of capital held (%)	Value of acquisition	Equity-accounted value 2023
Société Nationale de Circulation Automobile S.à r.l.	20,00	24.789	10.229.185
i-Hub S.A.	20,00	8.750.000	1.639.430
Luxair S.A.	21,81	14.830.609	402.702.054
Société de la Bourse de Luxembourg S.A.	25,35	6.979.907	71.475.594
LuxConstellation S.A.	30,00	75.000	75.000
Europay Luxembourg S.C.	30,10	188.114	1.069.163
LuxHub S.A.	32,50	3.705.000	1.893.216
Lalux Group S.A.	40,00	28.904.385	414.026.274
Visalux S.C.	40,90	438.049	4.091.443
Total		**63.895.853**	**907.201.359**

Associates	Fraction of capital held (%)	Value of acquisition	Equity-accounted value 2022 restated
Société Nationale de Circulation Automobile S.à r.l.	20,00	24.789	9.357.920
i-Hub S.A.	20,00	6.630.000	1.026.951
Luxair S.A.	21,81	14.830.609	384.292.382
Société de la Bourse de Luxembourg S.A.	25,35	6.979.907	70.049.065
Europay Luxembourg S.C.	30,10	188.114	969.731
LuxHub S.A.	32,50	3.705.000	1.923.181
Lalux Group S.A.	40,00	28.904.385	374.437.253
Visalux S.C.	35,36	373.071	4.627.383
Total		**61.635.875**	**846.683.867**

In financial year 2023, Spuerkeess acquired a 30% stake in LuxConstellation S.A. and participated in a capital increase for i-Hub 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	2023			
	Net income from continuing operations	Net income after tax from discontinued operations	Other items of comprehensive income	Total comprehensive income
Direct interests				
Société Nationale de Circulation Automobile S.à r.l.	835.098	-	36.167	871.265
i-Hub S.A.	-1.507.521	-	-	-1.507.521
Luxair S.A.	27.592.123	-	-9.182.451	18.409.672
Société de la Bourse de Luxembourg S.A.	2.664.067	-	1.158.762	3.822.829
LuxConstellation S.A.	-	-	-	-
Europay Luxembourg S.C.	-6.038	-	105.470	99.432
LuxHub S.A.	-24.995	-	-4.970	-29.965
Lalux Group S.A.	18.413.296	-	30.244.885	48.658.181
Visalux S.C.	192.895	-	-793.813	-600.918
Total	**48.158.925**	**-**	**21.564.050**	**69.722.975**

Associates	2022			
	Net income from continuing operations	Net income after tax from discontinued operations	Other items of comprehensive income	Total comprehensive income
Direct interests				
Société Nationale de Circulation Automobile S.à r.l.	476.295	-	-3.595	472.700
i-Hub S.A.	-1.433.818	-	-4.169.231	-5.603.049
Luxair S.A.	113.428.109	-	19.588.287	133.016.396
Société de la Bourse de Luxembourg S.A.	-6.728.830	-	45.087.750	38.358.920
Europay Luxembourg S.C.	5.675	-	42.230	47.905
European Fund Administration S.A.	-	-	518.060	518.060
LuxHub S.A.	-240.401	-	5.368	-235.033
Lalux Group S.A. restated	76.918.852	-	-68.612.387	-31.963.177
Visalux S.C.	64.500	-	45.813	110.313
Total	**182.490.382**	**-**	**-7.497.705**	**134.723.035**

4.10 Securities collateralised

- **Securities collateralised in the framework of repurchase agreements**

Headings	31/12/2022	31/12/2023
Debt instruments issued by the public sector	101.736.165	38.912.190
Debt instruments issued by credit institutions	93.550.066	281.170.376
Debt instruments issued - other	161.575.334	150.937.315
Total	**356.861.565**	**471.019.881**

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

The increase observed in other debt instruments stems from the higher number of collateral security agreements as at 31 December 2023.

- **Securities lent and other collateral**

Headings	31/12/2022	31/12/2023
Securities lending		
Debt instruments issued by the public sector	333.806.228	399.736.830
Debt instruments issued by credit institutions	-	-
Debt instruments issued - other	5.229.854	-
Total	**339.036.082**	**399.736.830**

4.11 Convertible bonds included in the different portfolios

The Group did not hold any convertible bonds as at 31 December 2023 or 31 December 2022.

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 as at 31/12/2023	Assets	Liabilities	Notional
Derivative financial instruments held for trading	**178.037.790**	**285.193.752**	**26.198.771.655**
Operations linked to exchange rates	139.702.847	255.802.676	16.772.571.233
- Foreign exchange swaps and forward exchange contracts	*139.702.847*	*253.859.231*	*16.746.218.552*
- CCIS	-	*1.943.445*	*26.352.681*
- other	-	-	-
Operations linked to interest rates	38.334.943	29.391.076	9.426.200.423
- IRS	*38.334.943*	*29.391.076*	*9.426.200.423*
- other	-	-	-
Fair value micro-hedges	**578.027.876**	**353.463.971**	**13.525.428.462**
Operations linked to exchange rates	145.411.777	105.866.141	2.664.023.740
- CCIS	*145.411.777*	*105.866.141*	*2.664.023.740*
Operations linked to interest rates	432.616.098	247.597.830	10.861.404.722
- IRS	*432.616.098*	*247.597.830*	*10.861.404.722*
Fair value macro-hedges	**537.518.855**	**45.711.209**	**4.821.274.170**
Operations linked to interest rates	537.518.855	45.711.209	4.821.274.170
- IRS	*537.518.855*	*45.711.209*	*4.821.274.170*
Cash flow hedging derivatives	**24.086**	**753.281**	**17.802.934**
Operations linked to exchange rates	-	753.281	12.402.934
- CCIS	-	*753.281*	*12.402.934*
Operations linked to interest rates	24.086	-	5.400.000
- IRS	*24.086*	-	*5.400.000*

Categories as at 31/12/2022	Assets	Liabilities	Notional
Derivative financial instruments held for trading	**132.075.729**	**294.865.180**	**21.218.813.373**
Operations linked to exchange rates	95.941.566	240.929.951	13.285.291.750
- Foreign exchange swaps and forward exchange contracts	*95.728.944*	*238.426.173*	*13.255.318.884*
- CCIS	*212.622*	*2.503.777*	*29.972.866*
- other	-	-	-
Operations linked to interest rates	36.134.163	53.935.229	7.933.521.623
- IRS	*36.134.163*	*53.935.229*	*7.933.521.623*
- other	-	-	-
Fair value micro-hedges	**735.387.874**	**300.490.923**	**11.966.992.484**
Operations linked to exchange rates	99.734.446	123.391.648	2.440.066.168
- CCIS	*99.734.446*	*123.391.648*	*2.440.066.168*
Operations linked to interest rates	635.653.428	177.099.275	9.526.926.316
- IRS	*635.653.428*	*177.099.275*	*9.526.926.316*
Fair value macro-hedges	**725.963.579**	**4.070.839**	**4.271.199.907**
Operations linked to interest rates	725.963.579	4.070.839	4.271.199.907
- IRS	*725.963.579*	*4.070.839*	*4.271.199.907*
Cash flow hedging derivatives	**1.192.678**	**2.619.678**	**121.604.920**
Operations linked to exchange rates	1.138.575	2.619.678	111.704.920
- CCIS	*1.138.575*	*2.619.678*	*111.704.920*
Operations linked to interest rates	54.103	-	9.900.000
- IRS	*54.103*	-	*9.900.000*

Fair value hedges at 31/12/2023	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	Ineffectiveness	Effectiveness 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	-294.364.562	-414.463.731	420.883.132	6.419.400	101,55%
		Macro-hedge	-477.452.432	-259.490.719	265.014.791	5.524.072	102,13%
Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	50.740.746	25.433.310	-26.360.002	-926.692	103,64%
Currency risk							
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost, Loans and advances at amortised cost – Customers	Micro-hedge	-91.931.553	-92.766.225	95.385.454	2.619.228	102,82%
Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	-111.220	-320.419	322.924	2.505	100,78%

Cash flow hedges at 31/12/2023	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	-29.552	-	24.782	-
Currency risk					
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost	37.036	-	-11.825	-

Fair value hedges at 31/12/2022	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	Ineffectiveness	Effectiveness 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	-715.247.694	833.894.714	-837.542.429	-3.647.715	100,44%
		Macro-hedge	-740.135.506	905.976.623	-907.289.664	-1.313.041	100,14%
Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	77.100.748	-83.427.056	83.862.002	434.946	100,52%
Currency risk							
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost, Loans and advances at amortised cost – Customers	Micro-hedge	-187.317.007	203.685.939	-205.546.036	-1.860.098	100,91%
Fixed-rate liability instruments	Issuance of debt securities	Micro-hedge	-434.144	-527.000	509.572	-17.429	96,69%

Cash flow hedges at 31/12/2022	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	-973.760	-	54.334	-
Currency risk					
Fixed-rate asset instruments	Fixed-income securities recognised at amortised cost	-81.286	-	-48.861	-

The amount shown in equity items for cash flow hedges is net of taxes and comes to EUR 9.725 for financial year 2023 and EUR 4.107 for the previous financial year.

Income on hedging activities recognised in net income and other comprehensive income at 31/12/2023	Net income or other comprehensive income
Fair value hedges (micro + macro hedges)	**13.638.514**
gains (losses) on hedging instruments	-756.515.203
gains (losses) on hedged instruments related to the hedged risk	755.246.299
ineffective part	14.907.418
Cash flow hedges	**7.484**
ineffective part	-
effective part	7.484
reclassified in profit or loss over the period	-

Reconciliation of the equity component at 31/12/2023	Cash flow hedges recognised in revaluation reserve
Balance at 1 January 2023	**5.472**
Change in fair value related to hedging of:	7.484
interest rate risk	*-29.552*
foreign exchange risk	*37.036*
Amount reclassified to profit or loss related to hedging of:	-
interest rate risk	-
foreign exchange risk	-
Balance at 31 December 2023	**12.956**

Income on hedging activities recognised in net income and other comprehensive income at 31/12/2022	Net income or other comprehensive income
Fair value hedges (micro + macro hedges)	**-6.403.337**
gains (losses) on hedging instruments	1.869.849.028
gains (losses) on hedged instruments related to the hedged risk	-1.866.006.555
ineffective part	-10.245.809
Cash flow hedges	**-1.055.046**
ineffective part	-
effective part	-1.055.046
reclassified in profit or loss over the period	-

Reconciliation of the equity component at 31/12/2022	Cash flow hedges recognised in revaluation reserve
Balance at 1 January 2022	**1.060.518**
Change in fair value related to hedging of:	-1.055.046
interest rate risk	*-973.760*
foreign exchange risk	*-81.286*
Amount reclassified to profit or loss related to hedging of:	-
interest rate risk	-
foreign exchange risk	-
Balance at 31 December 2022	**5.472**

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

Headings	31/12/2022	31/12/2023
Assets: Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-752.334.874	-488.436.242
Liabilities: Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-	-

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 2022 and 2023 is due primarily to the change in the interest-rate curves used to determine fair value.

This item was corrected under IAS 8: the amount for financial year 2022 was reclassified from the heading with the same name on the liabilities side to the assets side, as described in Note 2.1.4.

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 2022	**389.050.322**	**18.718.915**	**60.781.179**	**468.550.416**
Inflows	1.503.249	2.391.971	5.872.356	9.767.575
Exceptional transfers	-8.915.658	-	-	-8.915.658
Outflows	-3.462.177	-	-10.424.711	-13.886.889
Position as at 31 December 2022	**378.175.736**	**21.110.886**	**56.228.823**	**455.515.445**
Accumulated depreciation				
Position as at 1 January 2022	**165.967.409**	**9.489.991**	**35.935.566**	**211.392.967**
Depreciation	-3.019.739	-	-10.884.920	-13.904.659
Exceptional transfers	-7.885.069	-	-	-7.885.069
Depreciation expense	11.835.003	3.060.442	9.959.425	24.854.870
Position as at 31 December 2022	**166.897.605**	**12.550.433**	**35.010.071**	**214.458.110**
Net book value				
Position as at 1 January 2022	**223.082.913**	**9.228.924**	**24.845.613**	**257.157.449**
Position as at 31 December 2022	**211.278.131**	**8.560.453**	**21.218.752**	**241.057.335**

	Land and buildings		Other equipment and furniture	Total
	Property for own use	Right-of-use assets arising from leases		
Position as at 1 January 2023	**378.175.736**	**21.110.886**	**56.228.823**	**455.515.445**
Inflows	3.202.528	2.263.625	10.932.714	16.398.866
Outflows	-7.361.330	-	-8.293.234	-15.654.563
Position as at 31 December 2023	**374.016.934**	**23.374.511**	**58.868.303**	**456.259.748**
Accumulated depreciation				
Position as at 1 January 2023	**166.897.605**	**12.550.433**	**35.010.071**	**214.458.110**
Depreciation	-7.321.643	-	-8.291.879	-15.613.522
Depreciation expense	11.321.041	3.267.052	9.927.810	24.515.902
Position as at 31 December 2023	**170.897.002**	**15.817.486**	**36.646.002**	**223.360.490**
Net book value				
Position as at 1 January 2023	**211.278.131**	**8.560.453**	**21.218.752**	**241.057.335**
Position as at 31 December 2023	**203.119.932**	**7.557.025**	**22.222.301**	**232.899.258**

4.15 Investment property

Position as at 1 January 2022	**23.035.942**
Increases (acquisitions)	-
Increases (investment expenditure)	797.443
Exceptional transfers	8.915.659
Outflows	-1.819.939
Position as at 31 December 2022	**30.929.104**
Accumulated depreciation	
Position as at 1 January 2022	**12.605.278**
Depreciation	-1.346.747
Exceptional transfers	7.885.072
Depreciation expense	441.534
Position as at 31 December 2022	**19.585.137**
Net book value	
Position as at 1 January 2022	**10.430.664**
Position as at 31 December 2022	**11.343.967**

Position as at 1 January 2023	**30.929.104**
Increases (acquisitions)	-
Increases (investment expenditure)	203.094
Outflows	-1.325.658
Position as at 31 December 2023	**29.806.540**
Accumulated depreciation	
Position as at 1 January 2023	**19.585.137**
Depreciation	-1.319.691
Depreciation expense	897.800
Position as at 31 December 2023	**19.163.245**
Net book value	
Position as at 1 January 2023	**11.343.967**
Position as at 31 December 2023	**10.643.297**

Rental income from rented investment property amounted to EUR 3.487.406 for the 2023 financial year, versus EUR 3.287.849 in the prior year. Maintenance costs related to investment property were EUR 269.011 in 2023, compared with EUR 207.093 one year earlier.

The fair value of investment property stood at EUR 92.291.550 at year-end 2023, compared with EUR 91.137.213 at end-2022. This fair value measurement is categorised as Level 2 in the fair value hierarchy.

This fair value is estimated by a Spuerkeess 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 2022	**79.815.358**
Inflows	27.685.471
Outflows	-20.336.648
Position as at 31 December 2022	**87.164.182**
Accumulated depreciation	
Position as at 1 January 2022	**45.615.323**
Depreciation	-20.336.648
Depreciation expense	20.890.297
Position as at 31 December 2022	**46.168.973**
Net book value	
Position as at 1 January 2022	**34.200.035**
Position as at 31 December 2022	**40.995.209**

Position as at 1 January 2023	**87.164.182**
Inflows	31.196.267
Outflows	-16.910.106
Position as at 31 December 2023	**101.450.343**
Accumulated depreciation	
Position as at 1 January 2023	**46.168.973**
Depreciation	-16.910.106
Depreciation expense	24.870.454
Position as at 31 December 2023	**54.129.321**
Net book value	
Position as at 1 January 2023	**40.995.209**
Position as at 31 December 2023	**47.321.022**

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

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

The Group recognises tangible assets and financial assets held for sale in the near term under this heading in keeping with the provisions of IFRS 5.

Shareholdings classified as held for sale at 31 December 2023 correspond to shares in SES Global in the context of a buyback programme that has not yet been completed.

Headings	31/12/2022	31/12/2023
Variable-income securities recognised at fair value through the revaluation reserve		
Corporate customers	-	919.434
Total	**-**	**919.434**
of which: Unrealised profit/loss through the revaluation reserve	*-*	*697.602*

	2022	2023
Position as at 1 January	**-**	**-**
Sales	-6.985.620	-
Transfers	6.985.620	221.832
Profit/(loss) realised through own funds	14.529.966	-
Unrealised valuations	-14.529.966	697.602
Exchange gain or loss	-	-
Position as at 31 December	**-**	**919.434**

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 net current tax liability of EUR 2.560.981 as at 31 December 2023 versus EUR 78.491.337 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 2023, the Group posted a deferred tax asset of EUR 86.776.841, and a deferred tax liability of EUR 90.980.661.

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	01/01/2022	Movements in equity	Movements in income statement	31/12/2022
Deferred tax assets	140.639.406	-81.010.343	268.594	59.897.657
Deferred tax liabilities	-114.581.540	16.711.166	11.237.964	-86.632.411
Net deferred tax assets / liabilities	**26.057.865**	**-64.299.178**	**11.506.558**	**-26.734.754**

Headings	01/01/2023	Movements in equity	Movements in income statement	31/12/2023
Deferred tax assets	59.897.657	27.963.795	-1.084.611	86.776.841
Deferred tax liabilities	-86.632.411	-1.966.313	-2.381.937	-90.980.661
Net deferred tax assets / liabilities	**-26.734.754**	**25.997.482**	**-3.466.548**	**-4.203.820**

4.18.1 Tax assets

Headings	31/12/2022	31/12/2023
Current taxes	78.491.337	2.560.981
Income tax	*8.996.980*	*-14.138.434*
Municipal business tax	*69.515.222*	*16.720.280*
Wealth tax	*-20.865*	*-20.865*
Deferred taxes	59.897.657	86.776.842
Tax assets	**138.388.994**	**89.337.823**

Breakdown of deferred tax assets according to origin:

Headings	31/12/2022	31/12/2023
Derivative financial instruments - application of fair value	36.398	2.949
Debt instruments - application of fair value	1.250.970	-203.767
Equity instruments - application of fair value	746.188	820.336
Actuarial gains/losses relating to employee benefits	57.864.101	86.157.324
Deferred tax assets	**59.897.657**	**86.776.842**

4.18.2 Tax liabilities

Breakdown of deferred tax liabilities according to origin:

Headings	31/12/2022	31/12/2023
Derivative financial instruments - application of fair value	37.763	6.181
Debt instruments - application of fair value	224.096	1.628.313
Equity instruments - application of fair value	2.459.727	2.886.387
Regulatory and other provisions	83.910.825	84.888.543
Actuarial gains/losses relating to employee benefits	-	1.571.237
Deferred tax liabilities	**86.632.411**	**90.980.661**

4.19 Other assets

Headings	31/12/2022	31/12/2023
Operational outstandings	9.075.980	17.682.512
Preferential or secured borrowers	109.823	9.986.766
Other	1.076.297	1.706.645
Total	**10.262.100**	**29.375.923**

4.20 Deposits at amortised cost – Credit institutions

Headings	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Interbank deposits	4.834.193.743	301.071.340	5.135.265.084	4.862.965.509	27.078.368	4.890.043.877
of which central bank deposits	*1.200.251.625*	*250.000.000*	*1.450.251.625*	*48.627*	*-*	*48.627*
Repurchase/Reverse repurchase agreements	373.059.026	-	373.059.026	460.368.372	-	460.368.372
Other financial liabilities	174.061.418	-	174.061.418	74.298.068	-	74.298.068
Total	**5.381.314.187**	**301.071.340**	**5.682.385.528**	**5.397.631.950**	**27.078.368**	**5.424.710.317**

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 the two special reference periods, and in view of compliance with the conditions related to growth in the targeted loan categories, the Group's parent company was able to apply a return of 100 basis points when calculating the amortised cost of these deposits.

In light of the ECB's retroactive changes to the conditions of the TLTRO III, the Group's parent company made an initial repayment on 23 November 2022 for a nominal amount of EUR 1.250 million and a second repayment on 21 December 2022 for a nominal amount of EUR 750 million. The remaining balance of the TLTRO III was repaid early on 28 June 2023.

4.21 Deposits at amortised cost – Customers

Headings	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Private sector	**32.517.079.067**	**266.512.791**	**32.783.591.858**	**32.272.603.813**	**284.686.376**	**32.557.290.189**
Demand deposit and notice accounts	*14.716.587.693*	*-*	*14.716.587.693*	*11.633.928.002*	*-*	*11.633.928.002*
Time deposit accounts	*4.525.406.632*	*266.512.791*	*4.791.919.423*	*8.688.371.723*	*284.686.376*	*8.973.058.099*
Saving accounts	*13.275.084.743*	*-*	*13.275.084.743*	*11.950.304.089*	*-*	*11.950.304.089*
Repurchase/Reverse repurchase agreements	*-*	*-*	*-*	*-*	*-*	*-*
Public Sector	**7.166.246.114**	**1.176.449.262**	**8.342.695.376**	**6.419.883.574**	**1.061.990.553**	**7.481.874.127**
Total	**39.683.325.181**	**1.442.962.053**	**41.126.287.235**	**38.692.487.387**	**1.346.676.929**	**40.039.164.316**

4.22 Financial liabilities designated at fair value through profit or loss

Headings	31/12/2022			31/12/2023		
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Issues	-	131.633.032	131.633.032	15.029.065	154.462.778	169.491.843
Total	**-**	**131.633.032**	**131.633.032**	**15.029.065**	**154.462.778**	**169.491.843**
of which unrealised valuation	*-*	*-29.000.583*	*-29.000.583*	*355.348*	*-17.936.498*	*-17.581.150*

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	2022	2023
Position as at 1 January	**165.001.798**	**131.633.032**
Issues	-	24.220.000
Pro-rata interest	1.960.394	2.583.869
Unrealised valuations	-35.047.621	11.419.433
Exchange gain or loss	-281.539	-364.491
Position as at 31 December	**131.633.032**	**169.491.843**

4.23 Issuance of debt securities

Headings		31/12/2022			31/12/2023	
	=< 1 year	> 1 year	Total	=< 1 year	> 1 year	Total
Certificates of deposit	14.596.670	4.664.706	19.261.376	11.133.603	1.834.869	12.968.471
Commercial paper	2.022.188.043	-	2.022.188.043	2.537.079.223	-	2.537.079.223
Medium Term Notes and other securities issued	-	637.629.532	637.629.532	121.226.351	996.730.984	1.117.957.335
Total	**2.036.784.713**	**642.294.238**	**2.679.078.951**	**2.669.439.176**	**998.565.853**	**3.668.005.029**
of which subordinated notes	-	-	-	-	-	-
of which unrealised valuation (interest-rate component) for the purposes of hedge accounting	-	*-76.666.604*	*-76.666.604*	*-12.726*	*-50.616.800*	*-50.629.526*

"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	2022	2023
Position as at 1 January	**462.898.903**	**637.629.532**
Issues	315.000.000	450.742.716
Repayments/redemptions	-54.935.000	-1.503.556
Realised profit/(loss)	-	-
Pro-rata interest	951.668	7.530.107
Unrealised valuations	-84.371.574	26.037.078
Exchange gain or loss	-1.914.466	-2.478.542
Position as at 31 December	**637.629.532**	**1.117.957.335**

4.24 Provisions

This item comprises two main types of provisions: provisions to be established under IAS 37 and provisions on Group off-balance sheet 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 2022	**8.692.032**	**23.059.119**	**16.351.906**	**48.103.057**
Additions	8.727.237	-	13.175.863	21.903.101
Reversals	-1.417.499	-	-4.252.859	-5.670.358
Use	-5.775.656	-	-	-5.775.656
Exchange gain or loss	-	-	21	21
Expense included in personnel expenses	-	5.646.384	-	5.646.384
Position as at 31 December 2022	**10.226.115**	**28.705.503**	**25.274.931**	**64.206.549**
Position as at 1 January 2023	**10.226.115**	**28.705.503**	**25.274.931**	**64.206.549**
Additions	2.648.772	-	21.153.348	23.802.120
Reversals	-3.900.000	-	-8.670.108	-12.570.108
Use	-	-	-	-
Exchange gain or loss	-1.885.917	-	237	-1.885.680
Expense included in personnel expenses	-	8.529.358	-	8.529.358
Position as at 31 December 2023	**7.088.970**	**37.234.861**	**37.758.409**	**82.082.239**

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

Details of IFRS 9 provisioning:

	Stage 1	Stage 2	Stage 3	Total
Position as at 1 January 2022	**11.219.717**	**3.490.387**	**1.641.804**	**16.351.906**
Changes	**5.597.920**	**3.756.358**	**-431.253**	**8.923.025**
Increase due to acquisition and origination	6.581.442	592.079	14.579	7.188.101
Decrease due to repayment	-2.679.590	-414.625	-1.158.644	-4.252.859
Change related to credit risk	-2.413.961	3.009.625	712.813	1.308.477
Other changes	4.110.038	569.249	-	4.679.286
Exchange gain or loss	-9	30	-	21
Position as at 31 December 2022	**16.817.637**	**7.246.744**	**1.210.551**	**25.274.931**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	-172.926.541	172.061.142	865.399	-
Transfer from Stage 2	46.749.362	-47.363.322	613.961	-
Transfer from Stage 3	525.778	2.550.338	-3.076.117	-

Impaired loans as at 31 December 2022	Stage 1	Stage 2	Stage 3	Total
Outstanding	6.904.105.775	573.945.331	7.041.833	7.485.092.939
Position as at 1 January 2023	**16.817.637**	**7.246.744**	**1.210.551**	**25.274.931**
Changes	**-162.386**	**1.478.050**	**11.167.814**	**12.483.478**
Increase due to acquisition and origination	7.702.381	814.421	5.616.228	14.133.030
Decrease due to repayment	-5.823.137	-1.691.088	-1.155.883	-8.670.108
Change related to credit risk	-3.196.928	2.453.252	7.335.002	6.591.327
Other changes	1.155.305	-98.534	-627.534	429.237
Exchange gain or loss	-8	-1	-	-8
Position as at 31 December 2023	**16.655.251**	**8.724.794**	**12.378.364**	**37.758.409**

Outstanding loan stage transfers	Stage 1	Stage 2	Stage 3	Total
Transfer from Stage 1	-345.426.393	335.822.593	9.603.800	-
Transfer from Stage 2	77.386.252	-82.314.707	4.928.454	-
Transfer from Stage 3	225.439	371.940	-597.379	-

Impaired loans as at 31 December 2023	Stage 1	Stage 2	Stage 3	Total
Outstanding	6.553.562.654	699.788.693	73.121.831	7.326.473.178

4.25 Other liabilities

Headings	31/12/2022	31/12/2023
Operational outstandings	2.473.035	11.907.624
Privileged or guaranteed creditors	24.733.687	69.516.722
Liabilities arising from leases	8.560.453	7.557.025
Other	2.595.187	936.096
Total	**38.362.362**	**89.917.467**

4.26 Provisions for employee benefits – Defined-benefit pension plan

Main estimates used to determine provisions for employee benefits:

Variables	31/12/2022	31/12/2023
Discount rate for active employees	3,50%	3,40%
Discount rate for beneficiaries	3,60%	3,30%
Salary increases for persons entitled before 1999 (including indexation)	3,25%	3,00%
Salary increases for persons entitled after 1999 (including indexation)	3,25%	4,25%
Pension increases (including indexation)	2,25%	3,25%
Induced yield	3,56%	3,34%

The induced yield of 3,34% in 2023 corresponds to the weighted average of the discount rates for working people and for annuitants as fixed at the end of the 2023 financial year.

Net provisions for employee benefits entered under "Personnel expenses" in the income statement:

Components	31/12/2022	31/12/2023
Current service cost	15.922.348	8.159.458
Interest cost	9.234.007	19.788.480
Induced yield	-5.458.728	-16.364.436
Total	**19.697.627**	**11.583.502**

Pension commitments:

	2022	2023
Commitments on 1 January	**899.980.920**	**556.272.806**
Current service cost	15.922.348	8.159.458
Interest cost	9.234.007	19.788.480
Benefits paid	-14.821.663	-16.144.740
Actuarial gains or losses	-354.042.806	135.845.048
Commitments on 31 December	**556.272.806**	**703.921.052**

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 16.144.740 include the repayments to the Luxembourg State of civil servants' pensions in respect of the 2022 financial year.

Breakdown of actuarial gains and losses:

	2022	2023
Actuarial gains and losses arising from changes in actuarial assumptions		
- financial assumptions	*-356.558.811*	*24.177.481*
- demographic assumptions	-	*39.330.420*
Actuarial gains and losses arising from experience adjustments	2.516.005	72.337.147
Total actuarial gains and losses	**-354.042.806**	**135.845.048**

Sensitivity analysis of pension commitments:

Impact of changes in actuarial assumptions on the pension commitment on 31/12/2022	**Decrease**	**Increase**
Change in average actuarial rate (-/+ 50 bps)	52.019.149	-45.299.052
Change in wage increase rate (-/+ 50 bps)	-37.220.939	42.118.603
Change in pension increase rate (-/+ 25 bps)	-19.862.394	21.021.377
Change in mortality tables (-/+ 1 year)	14.159.786	-14.180.115

Impact of changes in actuarial assumptions on the pension commitment on 31/12/2023	**Decrease**	**Increase**
Change in average actuarial rate (-/+ 50 bps)	70.503.477	-61.003.466
Change in wage increase rate (-/+ 50 bps)	-42.889.850	50.833.950
Change in pension increase rate (-/+ 25 bps)	-27.350.932	29.036.640
Change in mortality tables (-/+ 1 year)	21.308.289	-21.145.373

Maturity analysis of pension commitments:

	31/12/2022	31/12/2023
Average duration of the pension commitment	**17,76 years**	**17,58 years**
Analysis of maturities of commitments to be paid	**556.272.808**	**703.921.052**
pensions outstanding for the year	8.210.362	9.064.941
commitments to be paid within 12 months	14.659.352	16.071.314
commitments to be paid in 1-3 years	30.224.532	33.951.099
commitments to be paid in 3-6 years	49.419.400	57.064.533
commitments to be paid in 6-11 years	86.692.276	101.514.778
commitments to be paid in 11-16 years	82.432.273	98.331.063
commitments to be paid after 16 years	284.634.612	387.923.324

Pension plan assets:

	2022	2023
Assets on 1 January	**532.028.042**	**460.019.704**
Benefits paid	-14.821.663	-16.144.740
Contribution	29.005.954	31.127.320
Induced yield	5.458.728	16.364.436
Fair value gain / loss	-91.651.357	28.699.955
Assets on 31 December	**460.019.704**	**520.066.675**

In 2023, Spuerkeess made an annual contribution of EUR 31.127.320 versus an annual contribution of EUR 29.005.954 in the previous year.

Pension plan investments:

2022	Credit institutions	Public Sector	Corporate	Total
Fixed-income securities	42.744.214	129.934.910	52.967.921	225.647.045
Variable-income securities	-	-	197.904.556	197.904.556
Real estate investment	-	-	14.696.000	14.696.000
Other assets (primarily deposits)	21.772.103	-	-	21.772.103
Total	**64.516.317**	**129.934.910**	**265.568.477**	**460.019.704**

2023	Credit institutions	Public Sector	Corporate	Total
Fixed-income securities	62.669.073	137.728.343	72.142.840	272.540.257
Variable-income securities	-	-	209.387.019	209.387.019
Real estate investment	-	-	14.674.326	14.674.326
Other assets (primarily deposits)	23.465.073	-	-	23.465.073
Total	**86.134.146**	**137.728.343**	**296.204.185**	**520.066.675**

Net pension commitments:

	2021	2022	2023
Pension commitments	899.980.920	556.272.806	703.921.052
Plan assets measured at fair value	-532.028.042	-460.019.704	-520.066.675
Unfinanced commitments	**367.952.878**	**96.253.102**	**183.854.377**

Stock of actuarial gains and losses:

Stock as at 1 January 2022	**494.404.681**
2022 net change	-262.391.449
Stock as at 31 December 2022	**232.013.232**
Stock as at 1 January 2023	**232.013.232**
2023 net change	107.145.093
Stock as at 31 December 2023	**339.158.325**

The amount shown in equity items is net of taxes and comes to EUR 254.572.242 for financial year 2023 and EUR 174.149.136 for the previous financial year.

Spuerkeess's estimated total contribution to provisions for employee benefits for 2024 is EUR 31.749.900.

4.27 Gains or losses on disposals of variable-income securities recognised at fair value

This heading under other items of other comprehensive income within equity includes the gains or losses on financial instrument transactions measured at fair value through the revaluation reserve.

Headings	31/12/2022	31/12/2023
Variable-income securities recognised at fair value through the revaluation reserve	-108	-241.249
Shares in associates and subsidiaries	1.528	185.023
Non-current assets and disposal groups classified as held for sale	14.529.966	-
Total	**14.531.386**	**-56.226**

The amount shown in equity items is net of taxes and comes to EUR 6.474 for financial year 2023 and EUR 14.531.312 for the previous financial year.

4.28 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.

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

	31/12/2022	31/12/2023
Deposits from associates	320.498.495	297.465.558
Total	**320.498.495**	**297.465.558**

	31/12/2022	31/12/2023
Loans from associates	13.279.587	10.222.821
Total	**13.279.587**	**10.222.821**

4.28.2 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 and the Group must, as a result, 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	31/12/2022	31/12/2023
Loans and advances at amortised cost	1.316.707.717	1.361.898.124
Fixed-income securities recognised at amortised cost	588.616.141	510.201.324
Fixed-income securities recognised at fair value through the revaluation reserve	20.494.980	21.630.635
TOTAL ASSETS	**1.925.818.837**	**1.893.730.082**

LIABILITIES	31/12/2022	31/12/2023
Deposits at amortised cost	6.350.806.619	6.028.746.070
TOTAL LIABILITIES	**6.350.806.619**	**6.028.746.070**

The "State and other government institutions" scope includes the various institutions that depend directly or indirectly on the State's budget.

4.28.3 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:

	31/12/2022	31/12/2023
Board of Directors (ten members)	540.000	553.000
Executive Board (five members)	1.013.167	1.468.758
Total	**1.553.167**	**2.021.758**

The change in the amount of total remuneration allocated to members of the Executive Committee reflects the three index bracket payments that were made in 2023, the fact that there were five members in place for the entire 2023 year compared with 2022 when one position remained vacant for several months, and certain remuneration paid in 2023 for financial year 2022 based on the regulations applicable to Spuerkeess.

4.28.4 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:

	31/12/2022	31/12/2023
Board of Directors (ten members)	4.442.127	3.786.246
Executive Board (five members)	43.340	846.584
Total	**4.485.467**	**4.632.831**

4.29 Statutory Auditor's fees

	2022	2023
Statutory audit of the company and consolidated annual financial statements	676.457	771.563
Other audit services	188.956	211.467
Other	220.164	247.731
Total	**1.085.577**	**1.230.761**

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

4.30 Direct fees and contributions related to the instruments and mechanisms put in place by the European Banking Union

Headings	2022	2023
European Central Bank supervision charges (1)	1.773.417	1.940.764
CSSF supervision charges	585.000	797.606
Single Resolution Board charges	229.486	714.371
Total	**2.587.903**	**3.452.741**
FGDL contribution	15.881.346	21.901.568
FRL contribution	25.857.126	13.088.010
Total	**41.738.472**	**34.989.578**

(1) The Group's parent company paid the invoice for 2022 in 2023.

4.31 Off-balance sheet items

Type of guarantees issued

Headings	31/12/2022	31/12/2023
Completion bonds	385.941.047	279.471.260
Letters of credit	102.977.116	99.394.597
Counter-guarantees	497.708.187	526.676.050
Other	59.423.353	36.989.823
Total	**1.046.049.703**	**942.531.729**

Commitments

Headings	31/12/2022	31/12/2023
Amounts subscribed and unpaid on securities, equity interests and shares in affiliated companies	12.580.824	12.571.080
Undrawn confirmed credits	6.411.362.412	6.356.265.369
Financing	*3.322.360.445*	*3.207.630.189*
Current accounts	*2.500.613.655*	*2.629.927.369*
Other	*588.388.313*	*518.707.812*
Documentary credits	15.100.000	15.100.000
Total	**6.439.043.236**	**6.383.936.449**

An amount of EUR 37.758.407 related to the calculation of expected credit losses was recorded in "Provisions" for financial year 2023, versus EUR 25.274.931 for the previous year.

Management of third-party assets

The Group provides management and representation services to third parties, particularly asset 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	2022	2023
Financial assets held for trading	237.350.386	317.659.230
Financial assets mandatorily measured at fair value through profit or loss	6.714.398	11.111.996
Financial assets recognised at fair value through the revaluation reserve	158.640	204.776
Fixed-income securities recognised at amortised cost	104.656.770	204.180.262
Loans and advances at amortised cost	499.513.077	1.174.852.165
Derivatives - Hedge accounting, interest rate risk	167.585.948	952.721.708
Other assets	6.250.975	19.665.763
Interest received on liability instruments	44.959.296	551.003
Total	**1.067.189.490**	**2.680.946.903**
of which interest calculated based on the effective interest rate	*1.025.037.038*	*2.587.702.282*

Interest paid and similar expenses	2022	2023
Financial liabilities held for trading	-108.718.003	-186.503.419
Financial liabilities designated at fair value through profit or loss	-2.827.004	-3.456.502
Liabilities at amortised cost - Deposits	-108.945.252	-909.691.137
Liabilities at amortised cost - Debt certificates	-50.381.336	-150.919.419
Liabilities at amortised cost - Subordinated loans	-2	-
Derivatives - Hedge accounting, interest rate risk	-273.339.093	-643.287.770
Other liabilities	-9.526	-26.282
Interest paid on asset instruments	-34.721.402	-4.448.205
Total	**-578.941.617**	**-1.898.332.734**
of which interest calculated based on the effective interest rate	*-525.551.210*	*-1.502.162.521*

Interest income	488.247.873	782.614.169
Total interest received and similar income not recognised at fair value through the income statement	655.380.118	1.399.249.193
Total interest paid and similar expenses not recognised at fair value through the income statement	-194.057.517	-1.065.085.043

[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	2022	2023
Variable-income securities recognised at fair value through the revaluation reserve	35.996.778	45.643.138
Income from securities	**35.996.778**	**45.643.138**

5.3 Fee and commission income

Headings	2022	2023
Loan activities	61.886.951	56.187.473
Asset management	70.458.246	62.869.037
Investment fund activities	60.874.698	59.411.508
Demand deposit accounts and related activities	40.493.567	43.023.175
Insurance premiums	2.600.441	2.597.802
Other (*)	7.718.202	7.915.010
Total commissions received	**244.032.105**	**232.004.005**
Loan activities	-4.634.467	-4.579.855
Asset management	-13.924.546	-11.409.081
Investment fund activities	-10.595.658	-8.799.575
Demand deposit accounts and related activities	-8.732.631	-10.169.724
Other (*)	-5.406.132	-3.742.226
Total commissions paid	**-43.293.434**	**-38.700.461**
Total commissions	**200.738.671**	**193.303.544**

(*) mostly fees on derivative financial instruments.

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

Headings	2022	2023
Fixed-income securities recognised at amortised cost	67.364	-1.121.257
Fixed-income securities recognised at fair value through the revaluation reserve	-1.944	-
Loans and advances at amortised cost	-2.977	-24.216
Financial liabilities at amortised cost	-	-
Total	**62.443**	**-1.145.473**

5.5 Income from financial instruments held for trading

Headings	2022	2023
Equity instruments and related derivatives	82	4.214
Foreign exchange instruments and related derivatives	1.695.861	-377.040
Interest rate instruments and related derivatives	-22.479.982	11.365.083
Total	**-20.784.039**	**10.992.257**

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

Headings	2022	2023
Financial liabilities designated at fair value through profit or loss	35.047.621	-11.419.433
Total	**35.047.621**	**-11.419.433**

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

Headings	2022	2023
Fixed-income securities	-17.859.507	9.353.403
UCI units	-13.485.639	9.550.680
Loans and advances	-1.260.312	-188.186
Total	**-32.605.458**	**18.715.897**

5.8 Income from hedging transactions

Headings	2022	2023
Fair value hedges		
Debt instruments (assets) hedged by derivative financial instruments	-7.701.445	11.013.395
Debt issues hedged by derivative financial instruments	417.517	-924.187
Loans hedged by derivative financial instruments	880.591	3.549.306
Total	**-6.403.337**	**13.638.514**
Value adjustment on hedged instruments	-1.866.006.555	755.246.299
Value adjustment on hedging instruments	1.859.603.219	-741.607.785
Total	**-6.403.337**	**13.638.514**

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 Foreign exchange income

Headings	2022	2023
Foreign exchange income	27.414.868	20.753.690
Total	**27.414.868**	**20.753.690**

5.10 Income from derecognition of non-financial assets

Headings	2022	2023
Income from derecognition of non-financial assets	8.065.407	1.629.409
Total	**8.065.407**	**1.629.409**

5.11 Other net operating income

Headings	2022	2023
Other operating income	14.214.396	17.594.252
Other operating expenditure	-2.940.934	-4.508.484
Other net operating income	**11.273.462**	**13.085.768**

"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 601 for 2023 and at EUR 941.846 for 2022.

5.12 Personnel expenses

Headings	2022	2023
Remuneration	208.071.129	231.297.711
Social security charges	7.345.756	7.912.431
Pensions and similar expenses	15.688.135	17.432.759
Provisions for employee benefits	19.697.627	11.583.502
Other personnel expenses	5.394.615	5.767.756
Total	**256.197.262**	**273.994.159**

5.13 Other general and administrative expenses

Headings	2022	2023
Expenses related to property and furniture	23.015.061	16.793.140
Rents and maintenance of software	36.205.914	39.274.747
Operating expenditure related to the banking business	36.259.970	43.348.129
Other	8.269.253	12.752.584
Total	**103.750.198**	**112.168.600**

5.14 Cash contributions to resolution funds and deposit guarantee systems

Headings	2022	2023
FGDL contribution	15.881.346	13.088.010
FRL contribution	25.857.126	21.901.568
Total	**41.738.472**	**34.989.578**

5.15 Depreciation allowances for tangible assets

- Depreciation expense

Headings	2022	2023
Depreciation expense - buildings	11.835.003	11.327.481
Depreciation expense - equipment and furniture	9.959.425	9.447.759
Depreciation expense - right-of-use assets in relation to leases	2.747.810	2.869.157
Depreciation expense for tangible assets	**24.542.238**	**23.644.397**

- Impairment

No impairment of tangible assets according to IAS 36 was recognised by the Group in 2023 or 2022.

5.16 Allowances for impairment of investment properties

- Depreciation expense

Headings	2022	2023
Depreciation expense	441.534	897.800
Depreciation expense for investment property	**441.534**	**897.800**

- **Impairment**

No impairment of investment properties according to IAS 36 was recognised by the Group in 2023 or 2022.

5.17 Allowances for impairment of intangible assets

- **Depreciation expense**

Headings	2022	2023
Depreciation expense	20.890.492	24.870.454
Depreciation expense for intangible assets	**20.890.492**	**24.870.454**

- **Impairment**

No impairment of intangible assets according to IAS 36 was recognised by the Group in 2023 or 2022.

5.18 Net allowances for impairment of credit risks

	2022			2023		
	Additions	Reversals	Total	Additions	Reversals	Total
Fixed-income securities recognised at amortised cost	-4.227.983	2.523.192	-1.704.791	-5.837.658	6.276.118	438.460
Fixed-income securities recognised at fair value through the revaluation reserve	-6.702	41	-6.661	-20.138	1.440	-18.699
Loans and advances	-84.153.811	39.972.515	-44.181.296	-179.929.599	58.023.529	-121.906.070
Total	**-88.388.496**	**42.495.748**	**-45.892.748**	**-185.787.396**	**64.301.087**	**-121.486.309**

Interest on financial assets impaired in Stage 3	2022	2023
Interest on impaired loans and advances	4.054.216	23.090.904
Total	**4.054.216**	**23.090.904**

5.19 Provisions

Headings	2022	2023
Provisions	-26.287.288	-30.995.500
Reversal of provisions	10.054.548	19.763.247
Total	**-16.232.740**	**-11.232.253**

5.20 Share in the profit of equity-accounted associates

Equity-accounted associates	2022 restated	2023
Société Nationale de Circulation Automobile S.à r.l.	476.295	835.098
i-Hub S.A.	-1.433.818	-1.507.521
Luxair S.A.	113.428.109	27.592.123
Société de la Bourse de Luxembourg S.A.	-6.728.830	2.664.067
LuxConstellation S.A.	-	-
Europay Luxembourg S.C.	5.675	-6.038
LuxHub S.A.	-240.401	-24.995
Lalux Group S.A.	76.918.852	18.413.296
Visalux S.C.	64.500	192.895
Total	**182.490.382**	**48.158.925**

The significant contribution from Luxair Group S.A. stems mainly from the inclusion in the scope of consolidation of its 35,1% interest in Cargolux S.A.

5.21 Tax expense

Headings	2022	2023
Tax on income from continuing operations	-56.026.836	-77.832.202
Deferred taxes	11.506.558	-3.466.548
Tax on profit/(loss) for the period	**-44.520.278**	**-81.298.750**

The nominal tax rate applicable in Luxembourg was 24,94% as at 31 December 2023 and 31 December 2022. The Group's effective tax rate was 15,3% in 2023 and 10,6% in the prior year, given the differences between the Luxembourg tax base and the accounting principles for annual financial statements in force in Luxembourg.

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

	2022	2023
Income before tax	419.858.988	532.686.852
Tax rate	24,94%	24,94%
Theoretical tax at the standard rate	104.712.832	132.852.101
Tax impact of non-deductible expenses	152.882	137.918
Tax impact of non-taxable income	-8.865.937	-11.075.150
Share in the income of equity-accounted associates	-45.513.101	-12.013.848
Tax rebates and reductions	-7.560.456	-24.139.640
Minority interests	-551.553	-527.905
Other	2.145.611	-3.934.726
Tax on profit/(loss) for the period	**44.520.277**	**81.298.750**

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 17,3% in 2023, versus 12,7% in 2022.

Taxation does not occur overall at the Group level but individually for each company within the Group.

5.22 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 0,80% for financial year 2023 versus 0,67% in the prior year.

6 RISK MANAGEMENT[10]

6.1 Risk management policy

6.1.1 Definition of risk appetite

The Group's parent company's objective is to contribute to the development of Luxembourg's economy and to generate enough profit to strengthen its financial position.

The Group's parent company has adopted a defensive risk profile which is defined in the Risk Appetite Framework (RAF) and in a set of limits that are intended to manage and control the various risks to which the Group's parent company is or might be exposed. These limits are indicated in the Group's parent company's Limit Handbook.

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.

The RAF also enables the Board of Directors and the Executive Committee to regularly monitor the Group's parent company's overall risk situation in detail.

6.1.2 Risk culture

Staff at the Group's parent company play an active role in identifying, reporting and monitoring the risks to which it is or might be exposed. The Group's parent company thus takes a positive approach to risk management and internal control.

The three internal control functions have drawn up an internal control charter with the goal of:

- establishing the principles and the minimum requirements needed for the Group's parent company's internal control system to function effectively;
- establishing the rules governing the organisation, responsibilities and scope of action of the internal control players, as well as their coordination.

[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.

Staff can use a dedicated portal to access this charter and the policies that describe how the Group's parent company manages different types of risks.

At their information sessions, the Executive Committee and other management bodies promote a healthy risk culture as well as the values of the Group's parent company ("tone from the top").

The pay grid for the Group's parent company's agents does not encourage risk-taking.

6.1.3 Capital management policy

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's parent company aims to retain moderate leverage, which is reflected in a high target solvency ratio. Moreover, financing the national economy is given priority in the allocation of capital resources.

6.2 Risk management governance

6.2.1 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 Group's parent company's Risk Appetite Framework, proposed by the Executive Committee. To do so, the Board considers the liquidity and solvency of the Group's parent company as well as the medium- and long-term sustainability of the latter's business model.

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 Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP) 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.

6.2.2 Role of the Risk Committee

The Risk Committee advises the Board of Directors (the Board) in its supervisory function and thus prepares the decisions to be adopted by the Board. It provides support in the specific areas relating to the multiple aspects of risks incurred by the Group's parent company that are inherent in the execution of its business model, in its strategic objectives, in legal, regulatory and technological changes and in changes in the social, commercial and competitive environment in which the Group's parent company operates. It consists of four members of the Board of Directors.

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

6.2.3 Role of the Audit and Compliance Committee

The Audit and Compliance Committee advises the Board of Directors in its supervisory role 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 members considered independent within the meaning of the applicable laws and regulations.

The Chief Executive Officer, Deputy Chief Executive Officer, Chief Risk Officer, Chief Compliance 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's parent company's financial statements may be invited to Audit and Compliance Committee meetings at the request of this Committee.

6.2.4 Role of the Appointment and Compensation Committee

The Appointment and Compensation Committee consists of four members of the Board of Directors considered independent within the meaning of the applicable laws and regulations. For specific matters relevant to aspects of compensation for staff at Spuerkeess, this committee meets as the

Compensation Committee and is joined, as members of this Compensation Committee, by the two members of the Board of Directors who represent Spuerkeess's staff.

6.2.5 Role of the Executive Committee

Pursuant to the Organic Law of 1989 and in accordance with the general policy and overall economic strategy of the Group's parent company defined by the Board of Directors on a proposal from the Committee, all administrative acts and measures necessary or relevant to the Group's parent company'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 parent company's risk appetite and risk management framework.

In 2022, the Group's parent company established Extended Management ("Direction élargie"), made up of members of the Executive Committee and 10 Senior Vice Presidents. This is a cross-functional decision-making body that develops opinions and proposals for structured monitoring of the Group's parent company and for the strategy and overall organisation. Effective cross-functional coordination is needed to develop and take action on these issues.

6.2.6 Role of the internal control functions

6.2.6.1 Role of the Risk Management Department

From an organisational point of view, the risk control function is delegated to the Risk Management department (DRM). This function operates independently from all commercial and operational activities within the Group's parent company. The Risk Management department is therefore part of the second line of defence. The DRM reports to the Chief Risk Officer, who is a member of the Executive Committee and also has a reporting relationship with the Board of Directors and, as such, may communicate directly and at his 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.

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

At the Enterprise Risk Management (ERM) unit level:

- defining and updating the Risk Appetite Framework;
- developing the internal models used to manage risks;
- coordinating the work related to the recovery plan and the resolution plan.

At the Financial Risk Management (FRM) unit level:

- monitoring changes in the quality of the credit risk of all of the Group's parent company's portfolios;
- monitoring other financial risks such as interest rate risk and liquidity risk;
- projecting the risk indicators and conducting stress tests.

At the Non-Financial Risk Management (NRM) unit level:

- providing independent validation of the internal models;
- monitoring and analysing operational incidents;
- monitoring the Cyber Protection Plan implemented by the first line of defence;
- overseeing the Group's parent company's IT security.

Cross-functional issues:

- identifying and assessing the risks the Group's parent company is facing or might face;
- 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;
- challenging the first lines of defence by performing second line of defence controls, among others;
- defining and updating the risk management policies and standards.

6.2.6.2 Role of the Compliance department

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 department is part of the second line of defence, together with the Risk Management department. It reports to the Executive Committee. The Chief Compliance Officer also has a reporting relationship with the Board of Directors and, as such, may communicate directly and at his 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 Spuerkeess.

The areas and responsibilities of the Compliance department 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 the Group's parent company is subject in the course of its activities.

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

6.2.6.3 Role of the Internal Audit department

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

The Internal Audit department is the third line of defence and the Chief Internal Auditor is accountable to the Executive Committee and to the Board of Directors for the performance of his duties. The Chief Internal Auditor thus also has a reporting relationship with the Board of Directors and may communicate directly and at his own initiative with the Chairman of the Audit and Compliance Committee, the Chairman of the Risk Committee, the Chairman of the Board of Directors and even with the supervisors of the Group's parent company.

The objectives are the following:

- protect the Group's parent company's assets;
- 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 the Group's parent company;
- 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 department and approved by the Audit and Compliance Committee and the Board of Directors.

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 department.

6.3 Main risks to which the Group's parent company is exposed

6.3.1 Credit risk

6.3.1.1 Definition

Credit risk is the risk of financial loss on receivables for the Group's parent company when a borrower is unable to meet its contractual obligations.
This risk mainly concerns the loan and credit activities, as well as the activities involving investments in financial debt instruments on the capital markets.

6.3.1.2 Credit risk management governance

The Credit Management department (DAG) manages credit risk within the first line of defence. The department operates independently from all commercial activities. It is responsible for:

- developing and periodically updating the credit risk limits and the framework for the granting of financing;
- valuing and periodically revaluing the personal and real property collateral offered as security;
- analysing the credit and counterparty risk of funding requests, considering them, and submitting them to the appropriate bodies for decision;
- managing the administrative aspects of the offers accepted by customers, entering into contracts, and paying out funds;

- monitoring, as the first line of defence, the credit risk associated with the financing granted by the Group's parent company.

The commercial departments play an active role in managing credit risk. Their ongoing contact with their customers enables them to identify and anticipate customers' financial difficulties.

The Financial Risk Management unit within the Risk Management department serves as the second line of defence.

6.3.1.3 *Credit risk management approach*

Counterparty risk is a subcategory of credit risk and is defined as:

- the risk that the counterparty to a market transaction could default before the final settlement of the transaction's cash flows; and
- a potential change in the measurement of the exposure, which depends on the intrinsic creditworthiness of a given counterparty (CVA risk).

The Group's parent company has negotiated International Swaps and Derivatives Association, Inc. (ISDA) framework agreements including Credit Support Annexes (CSAs) designed to limit counterparty risk on derivative financial instrument trades with a positive mark-to-market valuation. At end-2023, 90,5% of derivative financial instrument transaction outstandings were covered by such agreements.

Alongside the ISDA-CSA framework agreements, the Group's parent company makes use of central counterparties (CCPs) to limit counterparty risk. At end-2023, 8,8% of outstanding amounts of derivative transactions were liquidated through these CCPs.

6.3.1.4 *Concentration risk management approach*

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.

6.3.1.5 Exposure to credit and counterparty risk

Maximum exposure to credit risk	31/12/2022	31/12/2023
Cash and sight accounts with central banks	10.847.765.699	7.887.777.548
Loans and advances at amortised cost – Credit institutions	1.457.998.005	3.244.670.787
Loans and advances at amortised cost – Customers	26.705.358.823	26.967.687.941
Financial instruments held for trading	132.075.729	178.037.790
Hedging derivative financial instruments	1.462.544.131	1.115.570.816
Financial assets mandatorily recognised at fair value through profit or loss	490.686.909	430.875.837
Fixed-income securities recognised at amortised cost	13.586.207.982	14.831.125.424
Fixed-income securities recognised at fair value through the revaluation reserve	29.626.380	31.091.835
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-752.334.874	-488.436.242
Exposure of balance sheet commitments	**53.959.928.784**	**54.198.401.736**
Completion bonds	385.941.047	279.471.260
Letters of credit	102.977.116	99.394.597
Counter-guarantees	497.708.187	526.676.050
Other	59.423.353	36.989.823
Undrawn confirmed credits	6.411.362.412	6.356.265.369
Documentary credits	15.100.000	15.100.000
Exposure of off-balance sheet commitments	**7.472.512.115**	**7.313.897.099**
Total exposure	**61.432.440.899**	**61.512.298.835**

The Group's parent company uses the following standard techniques to mitigate credit and counterparty risk:

- collateral:

Breakdown by type of collateral	31/12/2022	31/12/2023
Mortgages	21.087.402.283	20.899.748.665
Reverse repurchase agreements	235.110.707	2.593.229.438
Pledge through cash or securities deposits	111.101.459	164.277.664

- personal guarantees: these stood at EUR 531.759.185 at year-end 2023, compared with EUR 619.462.646 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:

31/12/2023	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	2.610.606.897	-	2.610.606.897	120.870.760	2.469.086.889	20.649.248
Derivatives	1.220.761.133	-	1.220.761.133	413.982.778	751.531.293	55.247.062
Total assets	**3.831.368.030**	**-**	**3.831.368.030**	**534.853.538**	**3.220.618.182**	**75.896.310**

31/12/2022	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	235.409.659	-	235.409.659	2.501.802	231.315.739	1.592.118
Derivatives	1.474.403.358	-	1.474.403.358	214.731.724	1.206.771.746	52.899.888
Total assets	**1.709.813.017**	**-**	**1.709.813.017**	**217.233.526**	**1.438.087.485**	**54.492.006**

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

31/12/2023	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	339.497.612	-	339.497.612	-	330.097.647	9.399.965
Derivatives	262.724.864	-	262.724.864	52.349.408	203.750.741	6.624.715
Total liabilities	**602.222.476**	**-**	**602.222.476**	**52.349.408**	**533.848.388**	**16.024.680**

31/12/2022	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	370.557.224	-	370.557.224	-	368.306.310	2.250.914
Derivatives	378.697.438	-	378.697.438	108.769.340	252.672.524	17.255.575
Total liabilities	**749.254.662**	**-**	**749.254.662**	**108.769.340**	**620.978.834**	**19.506.489**

Pursuant to IFRS, the Group's parent company 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 31/12/2023 (in thousands of euros)	European Union and Switzerland	Other European countries	North America	Asia and Oceania	Supra-national	Other	Total
Cash and sight accounts with central banks	7.679.945	127.390	44.730	35.712	-	-	7.887.778
Loans and advances at amortised cost	30.001.515	46.312	12.826	146.071	92	5.542	30.212.359
Financial instruments held for trading and hedging derivative instruments	965.028	311.802	16.779	-	-	-	1.293.609
Financial assets mandatorily recognised at fair value through profit or loss	372.550	9.363	5.216	-	43.747	-	430.876
Fixed-income securities recognised at amortised cost	8.203.008	1.255.671	2.607.005	1.607.689	1.135.800	21.952	14.831.125
Financial instruments recognised at fair value through the revaluation reserve	786.164	-	-	-	-	-	786.164
Investments in associates accounted for using the equity method	907.201	-	-	-	-	-	907.201
Other	-164.716	-	-	-	-	-	-164.716
Total	**48.750.696**	**1.750.538**	**2.686.556**	**1.789.472**	**1.179.639**	**27.495**	**56.184.395**

Geographical area as at 31/12/2022 (in thousands of euros)	European Union and Switzerland	Other European countries	North America	Asia and Oceania	Supra-national	Other	Total
	restated						**restated**
Cash and sight accounts with central banks	10.636.859	161.334	25.716	23.857	-	-	10.847.766
Loans and advances at amortised cost	27.985.305	115.570	11.928	43.873	123	6.559	28.163.357
Financial instruments held for trading and hedging derivative instruments	1.104.737	469.599	20.284	-	-	-	1.594.620
Financial assets mandatorily recognised at fair value through profit or loss	426.262	18.246	9.088	-	37.092	-	490.687
Fixed-income securities recognised at amortised cost	7.650.800	1.425.174	2.363.294	1.344.670	802.270	-	13.586.208
Financial instruments recognised at fair value through the revaluation reserve	922.294	-	-	-	-	-	922.294
Investments in associates accounted for using the equity method	846.684	-	-	-	-	-	846.684
Other	-370.185	-	-	-	-	-	-370.185
Total	**49.202.755**	**2.189.922**	**2.430.309**	**1.412.400**	**839.485**	**6.559**	**56.081.430**

In the following table, to meet the requirements of IFRS 7 "Financial Instruments: Disclosures", exposure to credit risk as at 31 December 2023 and 2022 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:

	31/12/2022			31/12/2023		
	Outstanding excluding impairment	Outstanding with impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding with impairment	Average collateralisation ratio
Cash and sight accounts with central banks						
High grade	449.166.450	448.638.663	-	350.488.676	350.216.209	-
Standard grade	147.201.958	146.908.935	-	174.934	174.532	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	10.252.893.907	10.252.218.101	-	7.537.765.447	7.537.386.806	-
Total of categories	**10.849.262.315**	**10.847.765.699**		**7.888.429.057**	**7.887.777.548**	
Loans and advances at amortised cost						
Banks						
High grade	1.206.492.770	1.206.119.411	19,49%	3.060.044.566	3.060.012.857	83,27%
Standard grade	206.679.113	206.474.286	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Past due not in default	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	45.407.035	45.404.308	-	184.662.196	184.657.930	24,46%
Corporates						
High grade	1.953.112.791	1.941.723.265	76,81%	2.179.721.824	2.167.652.847	74,96%
Standard grade	1.406.698.895	1.394.860.516	54,22%	1.589.444.088	1.570.984.519	44,66%
Sub-standard grade	1.528.909.198	1.490.118.814	54,14%	1.182.749.962	1.145.122.137	65,38%
Past due not in default	60.793.016	60.365.989	57,62%	75.357.193	74.279.749	70,86%
Default	121.198.327	83.101.122	85,18%	273.780.032	192.849.198	83,26%
Not rated	951.461.747	950.745.227	-	1.204.080.748	1.187.063.995	0,41%
Sovereigns						
High grade	519.002.032	518.978.134	-	71.761	71.606	-
Standard grade	5.493.307	5.383.869	-	12.612	12.600	-
Sub-standard grade	-	-	-	18	18	-
Past due not in default	17.526.534	17.525.734	-	15.968.098	15.961.584	-
Default	-	-	-	-	-	-
Not rated	759.621.506	759.587.780	0,04%	1.346.440.994	1.345.896.427	-
Retail						
High grade	19.205.471.532	19.175.051.553	92,91%	17.261.991.315	17.246.447.058	93,60%
Standard grade	140.767.107	135.122.026	60,39%	1.223.241.176	1.208.187.968	80,57%
Sub-standard grade	14.082.037	13.694.675	85,05%	497.192.091	474.957.485	76,77%
Past due not in default	74.793.484	73.255.704	84,24%	107.367.861	103.498.078	92,78%
Default	95.788.461	79.803.276	84,64%	258.051.823	204.962.263	93,14%
Not rated	6.033.575	6.033.299	-	29.745.554	29.740.407	8,58%
Total of categories	**28.319.340.309**	**28.163.356.828**		**30.489.923.913**	**30.212.358.728**	

	31/12/2022			31/12/2023		
	Outstanding excluding impairment	Outstanding with impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding with impairment	Average collateralisation ratio
Financial instruments held for trading and hedging derivative instruments						
Banks						
High grade	141.590.351	141.590.351	9,20%	704.980.371	704.980.371	11,09%
Standard grade	59.974.825	59.974.825	50,55%	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	1.359.813.890	1.359.813.890	58,60%	530.905.155	530.905.155	71,18%
Corporates						
High grade	-	-	-	2.449.743	2.449.743	-
Standard grade	11.409.705	11.409.705	11,99%	4.739.984	4.739.984	-
Sub-standard grade	5.199.823	5.199.823	-	9.503.001	9.503.001	-
Default	-	-	-	-	-	-
Not rated	16.567.039	16.567.039	13,46%	40.661.466	40.661.466	22,80%
Sovereigns						
High grade	-	-	-	-	-	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Retail						
High grade	8.493	8.493	-	347.742	347.742	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	21.145	21.145	-
Default	55.734	55.734	-	-	-	-
Not rated	-	-	-	-	-	-
Total of categories	**1.594.619.859**	**1.594.619.859**		**1.293.608.606**	**1.293.608.606**	
Financial assets mandatorily recognised at fair value through profit or loss						
Banks						
High grade	206.863.327	206.863.327	-	230.762.590	230.762.590	-
Standard grade	2.827.043	2.827.043	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Corporates						
High grade	-	-	-	24.917.620	24.917.620	-
Standard grade	61.604.398	61.604.398	-	18.704.930	18.704.930	-
Sub-standard grade	12.042.492	12.042.492	-	17.711.595	17.711.595	-
Default	5.947	5.947	-	-	-	-
Not rated	73.648.702	73.648.702	-	94.602.983	94.602.983	-
Sovereigns						
High grade	133.647.777	133.647.777	-	44.125.154	44.125.154	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Securitisation						
High grade	-	-	-	-	-	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	33.441	33.441	-	50.965	50.965	-
Default	13.783	13.783	-	-	-	-
Not rated	-	-	-	-	-	-
Total of categories	**490.686.909**	**490.686.909**		**430.875.837**	**430.875.837**	

	31/12/2022			31/12/2023		
	Outstanding excluding impairment	Outstanding with impairment	Average collateralisation ratio	Outstanding excluding impairment	Outstanding with impairment	Average collateralisation ratio
	restated	restated				
Fixed-income securities recognised at amortised cost						
Banks						
High grade	4.935.404.616	4.931.818.355	-	6.416.292.580	6.413.341.507	-
Standard grade	983.861.950	982.523.069	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	22.938.014	22.915.446	-	9.626.675	9.622.920	-
Corporates						
High grade	1.731.533.152	1.730.228.975	-	4.118.360.208	4.116.836.761	-
Standard grade	2.908.585.490	2.906.092.026	-	1.388.575.544	1.387.165.666	-
Sub-standard grade	58.447.666	58.009.062	-	30.302.589	30.206.922	-
Default	-	-	-	-	-	-
Not rated	132.624.742	132.551.770	-	155.085.880	154.960.789	-
Sovereigns						
High grade	1.720.787.340	1.720.539.869	-	2.301.995.437	2.299.117.773	-
Standard grade	881.366.781	880.716.011	-	239.172.922	238.163.476	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	176.976.568	176.863.561	-	167.753.965	167.642.081	-
Securitisation						
High grade	38.162.897	37.859.136	-	12.311.039	12.213.048	-
Standard grade	6.139.571	6.090.703	-	1.792.302	1.778.036	-
Sub-standard grade	204.134	-	-	227.044	76.446	-
Default	-	-	-	-	-	-
Not rated	-	-	-	-	-	-
Total of categories	**13.597.032.924**	**13.586.207.982**		**14.841.496.186**	**14.831.125.424**	
Financial instruments recognised at fair value through the revaluation reserve and investments in associates accounted for using the equity method						
Banks						
High grade	4.479.600	4.479.600	-	4.674.550	4.674.550	-
Standard grade	-	-	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	7.894.054	7.894.054	-	8.025.523	8.025.523	-
Corporates						
High grade	127.210.587	127.210.587	-	123.074.447	123.074.447	-
Standard grade	685.303.887	685.303.887	-	542.145.030	542.145.030	-
Sub-standard grade	385.795.682	385.795.682	-	409.912.378	409.912.378	-
Default	-	-	-	-	-	-
Not rated	533.147.386	533.147.386	-	579.116.273	579.116.273	-
Sovereigns						
High grade	20.494.980	20.494.980	-	15.939.675	15.939.675	-
Standard grade	4.651.800	4.651.800	-	-	-	-
Sub-standard grade	-	-	-	-	-	-
Default	-	-	-	-	-	-
Not rated	-	-	-	10.477.610	10.477.610	-
Total of categories	**1.768.977.976**	**1.768.977.976**		**1.693.365.486**	**1.693.365.486**	
Other (*)	-370.184.926	-370.184.926	-	-164.716.327	-164.716.327	-
Total of categories	**-370.184.926**	**-370.184.926**		**-164.716.327**	**-164.716.327**	
Total	**56.249.735.367**	**56.081.430.328**		**56.472.982.757**	**56.184.395.301**	

(*) 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's parent company 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's parent company 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 excluding impairment" and "Outstanding including impairment".

Banks, Corporates, Sovereigns:
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 CCC
Outstanding amounts described as "Default" relate to outstanding amounts showing objective impairment evidence.

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-
Sub-standard grade : from BB+ to CCC

Retail:
The grouping according to internal risk category is made as follows for the Retail exposures, for example, using the following "S&P" equivalents:
High grade : from AAA to A+
Standard grade : from A to BBB-
Sub-standard grade : from BB+ to CCC
Outstanding amounts described as "Default" relate to outstanding amounts showing objective impairment evidence.

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. The Group's parent company pursued its prudent investment policy in 2023, resulting in:

- a large proportion of investments in covered bonds, which offer more security than senior unsecured bonds;
- investments in debt issued or 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.

6.3.2 Market risk

6.3.2.1 Definition

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 and share prices.

The market risks arising from the Group's parent company's business model are mainly interest rate risk and price risk on its strategic holdings.

6.3.2.2 Market risk management governance

The purpose of risk management is to ensure that the risk incurred matches the Group's parent company's risk appetite. To that end, the Group's 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.

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.

ALM and the Money Market desk 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 Financial Risk Management unit, which monitors every instance of a threshold being exceeded through the Risk working group, the Executive Committee and the Risk Committee.

6.3.2.3 *Market risk management approach*

The Group's parent company 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. A new tool gives the Group's parent company 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);
- basis risk (arising from differences in the benchmark indices for variable-rate instruments, on the one hand, and disparities between the nature of the indices and the frequency of coupon payments, on the other).

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 linear 200-basis-point increase in rates, is as follows:

Date	Scope	Scenario	Delta EVE	Delta EVE/Equity
31/12/2023	Entire banking book excluding equity	+200 bp	178.112.680	3,67%
31/12/2022	Entire banking book excluding equity	+200 bp	-155.662.307	-2,96%

Delta NII, for standard stress tests, i.e. a linear 200-basis-point increase in rates, is as follows:

Date	Scope	Scenario	Horizon	Delta NII	Delta NII/Equity
31/12/2023	ALM-gap + MM-treasury portfolio	+200 bp	1 year	-16.846.793	-0,35%
31/12/2022	ALM-gap + MM-treasury portfolio	+200 bp	1 year	-11.835.848	-0,23%

6.3.2.4 *Variable-income securities price risk management approach*

Shareholding valuation risk is measured using a Value-at-Risk (VaR) approach. This approach measures both the risk arising from the asset itself (equity risk) and the risk arising from the currency (foreign exchange risk).

This metric supplements the stress testing analysis conducted on a quarterly basis as part of the ICAAP.

6.3.2.5 <u>Exposure to credit risk</u>

6.3.2.5.1 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 parent company's financial instruments included in the consolidated financial statements.

Categories as at 31/12/2023	Carrying amount	Fair value	Unrealised valuation	Level 1	Level 2	Level 3
Financial assets						
Cash and sight accounts with central banks	7.887.777.548	7.887.777.548	-	-	-	-
Loans and advances at amortised cost	30.212.358.728	29.035.225.347	-1.177.133.381	-	-	100,0%
of which measured at fair value for hedging purposes	*1.128.894.628*	*1.128.894.628*	-	-	-	-
Financial instruments held for trading	178.037.790	178.037.790	-	-	-	-
Hedging derivative financial instruments	1.115.570.816	1.115.570.816	-	-	-	-
Financial assets mandatorily recognised at fair value through profit or loss	430.875.837	430.875.837	-	-	-	-
Fixed-income securities recognised at amortised cost	14.831.125.424	14.631.297.990	-199.827.434	88,0%	12,0%	-
of which measured at fair value for hedging purposes	*10.964.568.516*	*10.964.568.516*	-	-	-	-
Fixed-income securities recognised at fair value through the revaluation reserve	31.091.835	31.091.835	-	-	-	-
Variable-income securities recognised at fair value through the revaluation reserve	755.072.291	755.072.291	-	-	-	-
Investments in associates accounted for using the equity method	907.201.359	907.201.359	-	-	-	-
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-488.436.242	-488.436.242	-	-	-	-
TOTAL	**55.860.675.386**	**54.483.714.572**	**-1.376.960.814**			
Financial liabilities						
Deposits at amortised cost	45.463.874.633	44.575.685.210	-888.189.423	-	100,0%	-
Financial instruments held for trading	285.193.752	285.193.752	-	-	-	-
Hedging derivative financial instruments	399.928.461	399.928.461	-	-	-	-
Financial liabilities designated at fair value through profit or loss	169.491.843	169.491.843	-	-	-	-
Debt securities in issue	3.668.005.029	3.631.374.549	-36.630.480	-	100,0%	-
of which measured at fair value for hedging purposes	*1.121.534.733*	*1.121.534.733*	-	-	-	-
TOTAL	**49.986.493.718**	**49.061.673.816**	**-924.819.902**			

Categories as at 31/12/2022	Carrying amount	Fair value	Unrealised valuation	Level 1	Level 2	Level 3
	restated	**restated**				
Financial assets						
Cash and sight accounts with central banks	10.847.765.699	10.847.765.699	-	-	-	-
Loans and advances at amortised cost	28.163.356.828	25.947.556.668	-2.215.800.160	-	100,0%	-
of which measured at fair value for hedging purposes	*1.041.425.865*	*1.041.425.865*	-	-	-	-
Financial instruments held for trading	132.075.729	132.075.729	-	-	-	-
Hedging derivative financial instruments	1.462.544.131	1.462.544.131	-	-	-	-
Financial assets mandatorily recognised at fair value through profit or loss	490.686.909	490.686.909	-	-	-	-
Fixed-income securities recognised at amortised cost	13.586.207.982	13.348.826.009	-237.381.973	77,0%	23,0%	-
of which measured at fair value for hedging purposes	*9.500.754.376*	*9.500.754.376*	-	-	-	-
Fixed-income securities recognised at fair value through the revaluation reserve	29.626.380	29.626.380	-	-	-	-
Variable-income securities recognised at fair value through the revaluation reserve	892.667.729	892.667.729	-	-	-	-
Investments in associates accounted for using the equity method	846.683.867	846.683.867	-	-	-	-
Change in fair value of a portfolio of financial instruments hedged against interest rate risk	-752.334.874	-752.334.874	-	-	-	-
TOTAL	**55.699.280.380**	**53.246.098.247**	**-2.453.182.133**			
Financial liabilities						
Deposits at amortised cost	46.808.672.763	45.566.472.302	-1.242.200.460	-	100,0%	-
Financial instruments held for trading	294.865.180	294.865.180	-	-	-	-
Hedging derivative financial instruments	307.181.440	307.181.440	-	-	-	-
Financial liabilities designated at fair value through profit or loss	131.633.032	131.633.032	-	-	-	-
Debt securities in issue	2.679.078.951	2.650.576.723	-28.502.229	-	100,0%	-
of which measured at fair value for hedging purposes	*637.629.532*	*637.629.532*	-	-	-	-
TOTAL	**50.221.431.366**	**48.950.728.677**	**-1.270.702.689**			

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 "Securities recognised at amortised cost", "Deposits at amortised cost" and "Debt securities in issue" are categorised as Levels 1 and 2 in the fair value hierarchy. The fair value measurements in "Loans and advances at amortised cost" have, since financial year 2023, been assigned to Level 3 fair value due to a change in the assessment of the information used in the initial measurement.

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's parent company estimates their fair value as very close to their carrying amount. The credit risk is considered to be immaterial due to the Group's parent company'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

For the purpose of the fair value calculation, the Group's parent company distinguishes between:

- Financial assets and liabilities in the form of deposits and loans: the Group's parent company calculates fair value using the modelled discounted cash flow method;

- Financial instruments included in the portfolio of fixed-income securities recognised at amortised cost and categorised as Level 1 of the fair value hierarchy: these instruments are measured at their market price;

- Financial instruments included in the portfolio of fixed-income securities recognised at amortised cost and categorised as Level 2 of the fair value hierarchy: these instruments are measured at fair value 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

Categories as at 31 December 2023	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading	**-**	**178.037.790**	**-**	**178.037.790**
- Debt instruments	-	-	-	-
- Equity instruments	-	-	-	-
- Derivative financial instruments	-	178.037.790	-	178.037.790
- IRS	-	*38.334.943*	-	*38.334.943*
- CIRS/outright	-	*139.702.847*	-	*139.702.847*
Hedging derivative financial instruments	**-**	**1.115.570.816**	**-**	**1.115.570.816**
- IRS	-	*970.159.039*	-	*970.159.039*
- CIRS	-	*145.411.777*	-	*145.411.777*
Financial assets mandatorily recognised at fair value through profit or loss	**-**	**430.814.528**	**61.310**	**430.875.838**
- Debt instruments	-	386.712.366	61.310	386.773.675
- Public sector	-	*44.125.154*	-	*44.125.154*
- Credit institutions	-	*230.762.590*	-	*230.762.590*
- Corporate customers	-	*111.824.622*	*61.310*	*111.885.932*
- Other financial instruments	-	44.102.162	-	44.102.162
- Corporate customers	-	*44.102.162*	-	*44.102.162*
Variable-income securities recognised at fair value through the revaluation reserve	**28.118.094**	**114.588.678**	**612.365.518**	**755.072.291**
- Public sector	-	-	-	-
- Credit institutions	-	-	*8.025.523*	*8.025.523*
- Corporate customers	*28.118.094*	*114.588.678*	*604.339.995*	*747.046.768*
Fixed-income securities recognised at fair value through the revaluation reserve	**31.091.835**	**-**	**-**	**31.091.835**
- Public sector	*4.674.550*	-	-	*4.674.550*
- Credit institutions	*26.417.285*	-	-	*26.417.285*
Non-current assets and disposal groups classified as held for sale	**-**	**919.434**	**-**	**919.434**
- Corporate customers	-	*919.434*	-	*919.434*
TOTAL	**59.209.929**	**1.839.931.246**	**612.426.828**	**2.511.568.003**
Financial liabilities				
Derivative financial instruments held for trading	**-**	**285.193.752**	**-**	**285.193.752**
- IRS	-	*29.391.076*	-	*29.391.076*
- CIRS/outright	-	*255.802.676*	-	*255.802.676*
- other	-	-	-	-
Hedging derivative financial instruments	**-**	**399.928.461**	**-**	**399.928.461**
- IRS	-	*293.309.039*	-	*293.309.039*
- CIRS	-	*106.619.422*	-	*106.619.422*
Financial liabilities designated at fair value through profit or loss	**-**	**169.491.843**	**-**	**169.491.843**
TOTAL	**-**	**854.614.056**	**-**	**854.614.056**

Categories as at 31 December 2022	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading	**-**	**132.075.729**	**-**	**132.075.729**
- Debt instruments	-	-	-	-
- Equity instruments	-	-	-	-
- Derivative financial instruments	-	132.075.729	-	132.075.729
- IRS	-	*36.134.163*	-	*36.134.163*
- CIRS/outright	-	*95.941.566*	-	*95.941.566*
Hedging derivative financial instruments	**-**	**1.462.544.130**	**-**	**1.462.544.130**
- IRS	-	*1.361.671.110*	-	*1.361.671.110*
- CIRS	-	*100.873.021*	-	*100.873.021*
Financial assets mandatorily recognised at fair value through profit or loss	**-**	**490.633.739**	**53.171**	**490.686.910**
- Debt instruments	-	461.852.372	53.171	461.905.543
- Public sector	-	*133.647.777*	-	*133.647.777*
- Credit institutions	-	*209.690.369*	-	*209.690.369*
- Corporate customers	-	*118.514.225*	*53.171*	*118.567.396*
- Other financial instruments	-	28.781.367	-	28.781.367
- Corporate customers	-	*28.781.367*	-	*28.781.367*
Variable-income securities recognised at fair value through the revaluation reserve	**28.731.408**	**118.125.974**	**745.810.347**	**892.667.729**
- Public sector	-	-	-	-
- Credit institutions	-	-	*7.894.054*	*7.894.054*
- Corporate customers	*28.731.408*	*118.125.974*	*737.916.293*	*884.773.675*
Fixed-income securities recognised at fair value through the revaluation reserve	**29.626.380**	**-**	**-**	**29.626.380**
- Public sector	25.146.780	-	-	25.146.780
- Credit institutions	*4.479.600*	-	-	*4.479.600*
TOTAL	**58.357.788**	**2.203.379.572**	**745.863.518**	**3.007.600.878**
Financial liabilities				
Derivative financial instruments held for trading	**-**	**294.865.180**	**-**	**294.865.180**
- IRS	-	*53.935.229*	-	*53.935.229*
- CIRS/outright	-	*240.929.951*	-	*240.929.951*
- other	-	-	-	-
Hedging derivative financial instruments	**-**	**307.181.440**	**-**	**307.181.440**
- IRS	-	*181.170.115*	-	*181.170.115*
- CIRS	-	*126.011.326*	-	*126.011.326*
Financial liabilities designated at fair value through profit or loss	**-**	**131.633.032**	**-**	**131.633.032**
TOTAL	**-**	**733.679.653**	**-**	**733.679.653**

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.

A comparison of the breakdown of financial assets by level at end-2023 shows that 2,4% (1,9% in 2022) of financial assets are classified as Level 1, 73,3% (73,3% in 2022) as Level 2 and 23,3% (24,8% in 2022) as Level 3. The sharp decrease in Level 3 in percentage terms relates directly to the change in the fair values of the assets in question.

The Group's parent company 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	Other financial instruments		
Total as at 1 January 2023	**53.171**	**-**	**745.810.347**	**745.863.518**
Total gains / losses	978.865	-	-131.166.903	**-130.188.038**
- Income statement	*978.865*	-	-	***978.865***
- Revaluation reserve	-	-	*-131.166.903*	***-131.166.903***
Purchases	60.249	-	-	**60.249**
Reimbursements/sales	-1.110.001	-	-520.671	**-1.630.672**
Other changes	79.026	-	-1.757.254	**-1.678.228**
Transfers from Level 1 to Level 3	-	-		**-**
Transfers from Level 2 to Level 3	-	-	-	**-**
Transfers from Level 3	-	-	-	**-**
Total as at 31 December 2023	**61.310**	-	**612.365.518**	**612.426.828**
Total gains/losses for the period included in the income statement for financial assets and liabilities held as at 31 December 2023	478.671	-	29.955.870	**30.434.540**

	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	Other financial instruments		
Total as at 1 January 2022	**6.122**	**-**	**956.416.828**	**956.422.950**
Total gains / losses	218.430	-	-213.601.256	**-213.382.826**
- Income statement	*218.430*	-	-	***218.430***
- Revaluation reserve	-	-	*-213.601.256*	***-213.601.256***
Purchases	11.216	-	-	**11.216**
Reimbursements/sales	-27.137	-	-26.416	**-53.554**
Other changes	-155.459	-	2.897.790	**2.742.331**
Transfers from Level 1 to Level 3	-	-	123.402	**123.402**
Transfers from Level 2 to Level 3	-	-	-	**-**
Transfers from Level 3	-	-	-	**-**
Total as at 31 December 2022	**53.171**	-	**745.810.347**	**745.863.518**
Total gains/losses for the period included in the income statement for financial assets and liabilities held as at 31 December 2022	89.773	-	20.851.182	**20.940.955**

For financial year 2023, the decrease in Level 3 stemmed mainly from the fair value measurements applied to variable-income securities recognised at fair value through the revaluation reserve.

Methods used for the Level 3 valuation:

Category	Method
- Debt instruments	For securitisations, the fair value measurement is based on an estimate of future flows and on a dedicated basis spread (J.P. Morgan Int ABS & CB Research or SIFMA Markit). Some positions include an impairment that does not result solely from a determination based on the cash flow method but also takes an appraiser assessment into account.
- Equity instruments	The valuation methods applied are detailed in Section 3.3.3 Valuation techniques for determining fair value and the fair value hierarchy

Sensitivity analysis for Level 3:

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 2023 and 2022.

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:

31/12/2023	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	535.843.820	-63.324.958	63.312.495

31/12/2022	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	711.229.804	-71.069.376	72.738.331

For financial year 2023, the sensitivity analysis was performed on three major shareholdings. Financial year 2022 has been restated to maintain comparability.

6.3.2.6 *Analysis of foreign exchange risk*

As at 31/12/2023	Net balance sheet position
AUD	-4.608.559
CHF	-2.804.648
GBP	2.668.818
RON	3.581.705
USD	99.551.830
XAU	-9.355.734
Other	980.825
Total	**90.014.237**

As at 31/12/2022	Net balance sheet position
GBP	3.135.500
HRK	32.460.643
RON	4.034.673
USD	61.224.104
Other	1.440.518
Total	**102.295.438**

Only currencies with a net currency position exceeding EUR 2 million are recorded on a separate line.

6.3.3 Liquidity risk

6.3.3.1 *Definition*

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’s parent company is generally in a position of excess liquidity.

6.3.3.2 *Liquidity risk management governance*

The Group's parent company constantly monitors liquidity risk on the basis of maturities, This monitoring includes 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. Short-time financing needs in the main currencies are subject to specific limits.

The Group's parent company conducted the stress tests required by circular CSSF 09/403 in 2023 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's parent company 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's parent company would be able, if necessary, to access the repo market or participate in the ECB's money-market operations.

In the event of an urgent need for large amounts of liquidity, the Group's parent company has an intraday and overnight credit line with the Banque centrale du Luxembourg (BCL) secured by pledges of eligible securities. To this end, the Group's parent company 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 2023, the amount of the liquidity reserve immediately available with the BCL was EUR 9,32 billion, of which EUR 7,02 billion in cash. At year-end 2023, the amount of the portfolio of assets eligible for refinancing with the BCL (excluding BCL cash) or usable on the interbank market reached EUR 13,0 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 2023 financial year.

6.3.3.3 Exposure to liquidity risk

6.3.3.3.1 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 2023
Issuance of securities*	1.015.980.186	1.735.456.672	**2.751.436.857**	822.235.834	490.678.477	**1.312.914.312**	**4.064.351.169**
Deposits at amortised cost -							
Credit institutions	4.187.177.239	1.126.007.910	**5.313.185.149**	44.249.400	-	**44.249.400**	**5.357.434.549**
Customers	32.952.820.917	4.304.637.721	**37.257.458.638**	2.473.713.210	411.080.130	**2.884.793.340**	**40.142.251.977**
Liabilities arising from leases	790.024	2.370.073	**3.160.098**	4.348.457	48.471	**4.396.928**	**7.557.025**
Total	**38.156.768.367**	**7.168.472.375**	**45.325.240.742**	**3.344.546.901**	**901.807.078**	**4.246.353.979**	**49.571.594.721**

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2022
Issuance of securities*	823.114.355	1.249.193.461	**2.072.307.816**	433.828.517	517.332.273	**951.160.790**	**3.023.468.606**
Deposits at amortised cost -							
Credit institutions	3.697.376.825	1.717.694.586	**5.415.071.411**	289.105.854	-	**289.105.854**	**5.704.177.264**
Customers	35.444.260.906	3.768.951.809	**39.213.212.715**	1.364.669.369	529.432.414	**1.894.101.782**	**41.107.314.498**
Liabilities arising from leases	791.710	2.375.130	**3.166.840**	5.244.672	148.941	**5.393.612**	**8.560.453**
Total	**39.965.543.796**	**6.738.214.986**	**46.703.758.782**	**2.092.848.411**	**1.046.913.627**	**3.139.762.038**	**49.843.520.821**

* 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 2023
Issuance of securities*	1.018.107.596	1.736.607.756	**2.754.715.352**	832.561.047	496.699.531	**1.329.260.578**	**4.083.975.930**
Deposits at amortised cost -							
Credit institutions	5.288.128.781	115.231.840	**5.403.360.621**	28.996.648	4.320.802	**33.317.450**	**5.436.678.072**
Customers	19.490.766.868	4.577.427.581	**24.068.194.449**	8.649.903.332	8.095.856.062	**16.745.759.395**	**40.813.953.843**
Total	**25.797.003.245**	**6.429.267.177**	**32.226.270.422**	**9.511.461.027**	**8.596.876.396**	**18.108.337.423**	**50.334.607.845**

Headings	On demand - 3 months	3 months - 1 year	Sub-total < 1 year	1 - 5 years	> 5 years	Sub-total > 1 year	Total 2022
Issuance of securities*	824.011.651	1.248.389.403	**2.072.401.055**	434.044.687	529.815.548	**963.860.235**	**3.036.261.289**
Deposits at amortised cost -							
Credit institutions	4.125.887.336	1.325.154.396	**5.451.041.733**	288.653.770	1.425.252	**290.079.022**	**5.741.120.755**
Customers	16.375.009.672	4.937.860.028	**21.312.869.700**	11.226.511.288	10.823.883.563	**22.050.394.851**	**43.363.264.551**
Total	**21.324.908.660**	**7.511.403.828**	**28.836.312.488**	**11.949.209.745**	**11.355.124.363**	**23.304.334.108**	**52.140.646.596**

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

6.3.3.3.2 Schedule of derivative 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 2023 and 31 December 2022.

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2023
Derivative financial instruments held for trading					
Foreign exchange swaps and forward exchange contracts					
Inflows	12.142.476.517	4.037.265.646	488.568.339	3.187.149	16.671.497.652
Outflows	-12.223.983.009	-4.057.004.937	-489.923.051	-4.767.303	-16.775.678.301
Derivative financial instruments used for hedging purposes					
CCIS					
Inflows	72.532.415	137.042.808	1.356.394.892	756.571.026	2.322.541.141
Outflows	-115.845.479	-247.047.223	-1.772.157.936	-825.782.434	-2.960.833.071
Total inflows	**12.215.008.932**	**4.174.308.453**	**1.844.963.231**	**759.758.176**	**18.994.038.793**
Total outflows	**-12.339.828.488**	**-4.304.052.160**	**-2.262.080.987**	**-830.549.737**	**-19.736.511.372**

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2022
Derivative financial instruments held for trading					
Foreign exchange swaps and forward exchange contracts					
Inflows	9.829.314.764	2.498.531.746	825.419.609	4.205.143	13.157.471.262
Outflows	-9.903.153.312	-2.550.036.226	-830.645.844	-4.368.363	-13.288.203.745
Derivative financial instruments used for hedging purposes					
CCIS					
Inflows	88.994.752	293.881.534	1.090.923.014	721.093.437	2.194.892.737
Outflows	-122.291.012	-409.006.373	-1.518.979.252	-836.891.238	-2.887.167.875
Total inflows	**9.918.309.516**	**2.792.413.280**	**1.916.342.623**	**725.298.580**	**15.352.363.999**
Total outflows	**-10.025.444.324**	**-2.959.042.599**	**-2.349.625.096**	**-841.259.601**	**-16.175.371.620**

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 2023
Derivative financial instruments held for trading					
IRS	3.877.912	2.252.159	16.072.239	41.021.402	63.223.712
Derivative financial instruments used for hedging purposes					
IRS	-61.021.713	-215.252.821	-733.092.557	-724.895.212	-1.734.262.304
Total outflows	**-57.143.801**	**-213.000.662**	**-717.020.318**	**-683.873.810**	**-1.671.038.592**

Headings	On demand - 3 months	3 months - 1 year	1 - 5 years	> 5 years	Total 2022
Derivative financial instruments held for trading					
IRS	-841.904	2.970.313	6.844.199	21.111.691	30.084.299
Derivative financial instruments used for hedging purposes					
IRS	3.321.826	-133.257.088	-465.473.570	-467.122.574	-1.062.531.406
Total outflows	**2.479.922**	**-130.286.775**	**-458.629.371**	**-446.010.883**	**-1.032.447.107**

6.3.4 Settlement and delivery risk

6.3.4.1 Definition

Settlement risk is the risk that transactions in debt securities, equities, currencies and commodities will not be settled on the delivery date.

Delivery risk refers to the risk that a transaction in a transactional system will not be executed as intended. In general, this occurs when:

- one of the counterparties is not able to meet its obligations in a timely manner (missed deadline, transaction error, technical issue);
- one of the counterparties to the transaction defaults.

Delivery risk may be assessed from a default risk perspective as well as from a liquidity perspective.

6.3.4.2 *Settlement and delivery risk management approach*

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 parent company's liquidity risk by netting transactions, which considerably reduces settlement volumes.

6.3.5 Operational risk

6.3.5.1 *Definition*

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.

6.3.5.2 *Operational risk management governance*

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

The roles and responsibilities of the internal control functions as well as the first line of defence are clearly highlighted in the Internal Control Charter and 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.

6.3.5.3 *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. The approach also involves analysing the operational incidents observed and defining the related mitigation measures.

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. The various methods and practices of operational risk management can implement a dual dynamic: ex-ante, for example, through Key Risk Indicators, or ex-post, for example, 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's parent company adopts the standard approach.

Process and control improvements are actions taken to strengthen the control environment and thus the implementation of 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 recommendation from the second line of defence or 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, or other resources), 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.

Proper management of operational risk requires the promotion of a strong risk control culture.

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.

6.3.6 IT and cyber risks

6.3.6.1 Definition

IT and cyber risk is defined as the risk of loss arising from an inadequate information system organisation, an information system malfunction or insufficient information system security.

6.3.6.2 IT and cyber risk management governance

IT and cyber risk governance is closely tied to the governance in place for operational risks. This includes the three lines of defence concept as well as the decision-making bodies, such as the Risk Management Committee.

A "Security Policy" defines the different roles and responsibilities as well as the guidelines applicable to oversight of IT and cyber risk management.

This "Security Policy" is further supplemented by a set of security standards that details the specific requirements applicable to the areas and sub-areas within the IT scope.

6.3.6.3 IT and cyber risk management approach

The practices used to identify and assess IT and cyber risks are also incorporated into and compatible with the entire operational risk supervision and management system.

The Group's parent company has established processes for identifying and assessing IT and cyber risks in the event of changes or the introduction of new products. These practices are further supplemented by an annual risk assessment and control process covering the IT activities scope.

The various information gathered through IT and cyber risk identification and assessment practices is used in the determination of the economic capital allocation performed as part of the Internal Capital Adequacy Assessment Process (ICAAP).

The Risk Management team responsible for supervising IT and cyber risks also monitors the action plans that aim to improve the Group's parent company's protection system.

6.3.7 Climate and environmental risks

6.3.7.1 <u>Definition</u>

Climate change and environmental degradation are sources of structural changes that can influence economic activity and thus the financial system. Climate-related and environmental risks consist of two main risk factors:

- **Physical risk** refers to the financial effects of climate change, including more frequent extreme climate events and gradual changes in climate, as well as the financial effects of environmental degradation due to air, water and land pollution, water stress, biodiversity loss and deforestation.
- **Transition risk** is defined as the financial loss an institution might incur, directly or indirectly, from the process of adjusting to a low-carbon and more environmentally sustainable economy.

6.3.7.2 <u>Climate and environmental risk management governance and approach</u>

The Group's parent company does not view climate-related and environmental risks as a new risk category, but rather as an aggravating factor (risk driver) for the other risk categories, such as credit risk, market risk, operational risk, and reputational risk. Climate and environmental (C&E) risk management governance therefore falls within the governance implemented to manage the other risk categories.

6.3.7.3 <u>Climate and environmental risk management approach</u>

6.3.7.3.1 Credit risk

Climate and environmental risks are identified and measured as part of the risk identification and assessment process. Under the approach used to identify and assess climate-related and environmental credit risks, the Group's parent company's portfolio is divided into three parts:

- the domestic portfolio (retail customers, mortgage loans, financing for domestic companies, shareholdings);
- the international portfolio (investment portfolio, custodian bank);

- the Group's parent company's own operations.

For each of these segments, the Group's parent company assesses the climate and environmental risks (physical and transition) to which it is directly or indirectly exposed through transmission channels.

Transmission channels are the causal chains that link climate risk factors to the financial risks faced by banks. They help explain how climate and environmental risks might materialise as a source of instability for the Group's parent company. These channels distinguish between:

- microeconomic channels: direct impacts on counterparties, assets and exposures;
- macroeconomic transmission channels: direct impacts on the Group's parent company due to the effects of climate and environmental risks on economic indicators such as productivity and/or economic growth.

To better manage climate-related and environmental risks, the Group's parent company has defined its first climate and environmental risk management framework. This framework focuses on both transition climate risks and physical climate and environmental risks. The Group's parent company has incorporated various key risk indicators relating to climate and the environment into its Risk Appetite Framework, reflecting, among other things, the goal of reducing its portfolio's carbon intensity. In addition, efforts have been made to reduce transition risk by limiting exposures related to domestic companies active in the seven NACE sectors that are particularly vulnerable to this risk.

After participating in the European Central Bank's climate stress test in 2022, the Group's parent company developed its own climate stress tests in 2023 following the guidelines of the United Nations Environment Programme Finance Initiative (UNEP FI) framework programme. The methodology is based on the climate scenarios derived from scientific climate models (integrated assessment models (IAMs)). The climate scenarios and parameters refer to those provided by the Network for Greening the Financial System (NGFS), which has developed several climate trajectories to meet the financial sector's needs.

The initial analyses and results showed that climate-related and environmental risks have no material impact on the risk profile of the Group's parent company. Exposure to financed sectors sensitive to transition risks and to greenhouse gas (GHG) emissions is relatively low compared with that of our peers. Furthermore, the Group's parent company's activities are not located in regions subject to high physical risks.

6.3.7.3.2 Liquidity risk

The Group's parent company's liquidity risk profile may be affected by C&E risk factors both directly, through the Group's parent company's inability to obtain financing or liquidate assets under normal market conditions, or indirectly, through its customers' increased need for liquidity. The risk is measured by calculating the survival period and the LCR after 60 days for different climate scenarios. As its liabilities have limited exposure to sectors that are exposed to climate variations or are located in regions associated with physical risk, the Group's parent company considers its liquidity risk to be low.

6.3.7.3.3 Market risk

C&E risk factors can lead to higher volatility and lower asset values on certain markets with particularly high exposure to physical risks and/or transition risks. These price adjustments can be sudden and significant when climate risk has not yet been incorporated into market prices. The Bank's bond portfolio is, in principle, held to maturity and the vast majority of the securities are recognised at amortised cost. For these bonds, the market risk resulting from climate and environmental risk has been assessed as low.

6.3.8 Sanction and reputational risk

6.3.8.1 *Definition*

By sanction and reputational risk, we mean the risk of legal, administrative or disciplinary sanctions arising from failure to comply with provisions specific to banking and financial activities as well as the risk incurred by the Group's parent company with respect to its brand image and reputation, which could be damaged by rumours, scandals, disputes or the imposition of a sanction.

The risk of regulatory non-compliance with the provisions specific to banking and financial activities, whether they are legislative or regulatory in nature or concern professional or ethical standards, is directly related to sanction risk.

6.3.8.2 *Sanction and reputational risk management governance and approach*

The Group's parent company has adopted a regulatory watch policy which aims to ensure the bank is in compliance with all applicable regulations, in particular those related directly to the financial sector. The first step was for a dedicated team to identify and create a list of these regulations.

These texts are made available to all staff. For each new text, a report and a gap analysis are prepared in collaboration with the topic owners, who are business line specialists in the areas covered by the texts in question. Monthly work meetings are held to support and monitor the progress made on the new obligations to be taken into account in order to remain compliant. A detailed report, including monitoring indicators and alerts, is sent to the Compliance Committee and the executive board every quarter.

In accordance with the provisions of Circular CSSF 12/552, as amended, the Group's parent company has adopted guidelines for implementing the guiding principles formalised by the Board of Directors with respect to the approval of new products (and new activities). An internal procedure defines the key factors to be taken into consideration when assessing the potential new risks related to the new products or activities under review, and when defining mitigation measures.

The Group's parent company has opted for a federated governance model in terms of regulatory watch. In this type of model, standards are defined centrally and implemented locally, within the Group's parent company's units. This federated model empowers the different players and separates the verification functions (second line of defence) from the operational functions (first line of defence), in accordance with the requirements of Circular CSSF 12/552, as amended. This model ensures the overall consistency of the regulatory watch at the Group's parent company level and relies on a centralised team that has a complete picture of all current and future regulations. This team is also responsible for disseminating this information across the Group's parent company and for monitoring it for compliance by the business line units.

The second line of defence is responsible for a series of controls, documented in a control plan established annually, with the goal of evaluating the presence and robustness of the systems in place to ensure compliance with the current obligations and regulations applicable to each of the Group's parent company's activities. These controls help identify the risk factors that should be given priority, and result in recommendations calling for action plans within a set deadline. These plans should be followed to mitigate these risks and thus avoid instances of non-compliance that could result in sanctions and/or damage the Group's parent company's reputation.

6.3.9 Money laundering and financing of terrorism risk

6.3.9.1 Definition

"Money laundering" should be understood to mean "any act, in particular concealment, disguise, acquisition, possession, use, or transfer, to which the law expressly confers, in relation to the crimes or misdemeanours specified therein, the character of a specific criminal offense and which relates to the proceeds, that is, any economic advantage, derived from another criminal offence". The list of underlying criminal offences is quite lengthy and subject to change. It includes, among others, drug trafficking, forgery, environmental crimes and misdemeanours, bribery, aggravated tax evasion, market abuse, and failure to comply with restrictive financial measures.

"Financing of terrorism" is defined as the act of "directly or indirectly, unlawfully and wilfully, providing or collecting funds or assets of any nature with the intention that they should be used to commit one or more of the offences defined as an act of terrorism or as hostage-taking, even if they have not actually been used to commit one of these offences".

6.3.9.2 Money laundering and financing of terrorism risk management governance

The Group's parent company has implemented an anti-money laundering and combating the financing of terrorism (AML/FT) system that follows the three lines of defence model.

The commercial functions are responsible for customer business relationships and gather the necessary information and documents both at the start of and over the course of the relationship.

The AML Office unit is in charge of the first-level Know Your Customer and Know Your Transaction controls both at the start of the relationship and when monitoring the business relationship.

Also, in accordance with Article 4 (1) of the law of 12 November 2004 (as amended), the Group's parent company has appointed an officer responsible for compliance with professional obligations ("Responsable du respect des obligations professionnelles", or RR) as well as an officer responsible for control of professional obligations ("Responsable du contrôle des obligations professionnelles", or RC).

The role of RR was thus assigned to the member of the Executive Committee with responsibility for the Compliance department and that of RC to the Chief Compliance Officer (CCO), who heads the Compliance department which houses the Financial Crime Compliance unit.

The latter unit is responsible for all second line of defence tasks and controls relating to AML/FT themes, including intervening in high-risk application approval flows, as well as the financial sanction, bribery, customer tax compliance and market abuse components, and for relationships with the competent authorities in the context of suspicious activity related to AML/FT. Training on AML/FT is organised for all staff, both for new hires and on an ad hoc basis for topics that are of particular concern to certain business lines.

6.3.9.3 Money laundering and financing of terrorism risk management approach

In accordance with Article 4 (4) of amended CSSF Regulation 12-02 and with the risk-based approach required by the amended law of 12 November 2004 on anti-money laundering and combating the financing of terrorism (AML/FT) included in Chapter 3 of amended CSSF Regulation 12-02, the Group's parent company has defined its risk appetite with respect to AML/FT. This "AML/FT Risk Appetite Definition" policy was approved by the Board of Directors on 27 September 2023.

The Group's parent company has adopted a "conservative" profile, which takes into account the type of acceptable customers, as well as the authorised geographic regions. Each country is assessed from the perspective of AML/FT, the products that may be offered, and the distribution channels used.

The Group's parent company has also adopted a risk-based approach to assess customers' AML/FT risk. This assessment is carried out both when the request is made to enter into the business relationship and over the course of the relationship as part of ongoing due diligence.

This risk assessment results in the implementation of various due diligence measures which fall into three categories: standard, simplified or enhanced due diligence measures. They are applied both to requests to enter into relationships and as part of ongoing due diligence to monitor the relationship.

In the context of the assessment of customers' AML/FT risk, the Group's parent company developed a calculation algorithm based on risk factors related to the types of customers, the countries and geographic regions, the products, services and transactions carried out, and the distribution channels used.

The Group's parent company also ensures that the transactions carried out by its customers are suited to its customers' knowledge, their activities, their financial situation and their risk profile.

To that end, various controls are performed on a daily basis to monitor and identify transactions that are problematic or complex or involve a high or unusual amount, given the customer's risk profile.

6.3.10 Fraud risk

6.3.10.1 Definition

By fraud, we mean any practice prohibited by and/or contrary to the laws or rules[11] of the Group's parent company, including omission, concealment or misrepresentation which, knowingly or through gross negligence, maliciously or with intent to defraud, misleads a party with the aim of obtaining a financial or other benefit, or of avoiding an obligation. The fraud may be against the Group's parent company and/or its customers. Fraud also covers actions justified by non-financial motivations, if these are carried out in violation of laws, regulations or internal procedures applicable within the Group's parent company. Legally, fraud is defined as an act carried out using unfair means intended to deceitfully obtain consent or obtain an undue material or moral advantage, or that is carried out with the intent to avoid enforcement of the law.

A distinction is made between internal fraud and external fraud:

- internal fraud: act of fraud committed by a member of the Group's parent company's staff. External staff working for the Group's parent company under a contract (e.g. consultants, suppliers or contractors) should be considered members of the Group's parent company's staff in the context of this policy.
- external fraud: act of fraud committed by any external actor (e.g. potential customer, existing customer, unidentified third party, etc.) who is not a member of the Group's parent company's staff.

6.3.10.2 Fraud risk management governance and approach

The fraud risk management system is based on the principle of the three lines of defence applied under the federated model, meaning that decisions are made centrally and implemented locally (at the first line of defence entities).

The roles and responsibilities of the players in the three lines of defence are explained in a Fraud Risk Management Policy. They are supervised by the Audit and Compliance Committee and managed by the Executive Committee, the Compliance Committee and a Fraud Protection Officer in the control function.

The first line of defence (1LoD) is responsible for:

- managing the fraud risks generated by its activity.

[11] By Spuerkeess rules, we mean the Spuerkeess staff code of conduct and the security policy.

The second line of defence (2LoD) is responsible for:

- defining the Fraud Risk Management Policy and the anti-fraud standards;
- supervising the fraud risk management practiced by the first line of defence;
- raising awareness of fraud risk.

The third line of defence (3LoD) is responsible for:

- performing an independent control of the first two lines of defence.

In accordance with the guiding principles, the 1LoD and 2LoD players collaborate to ensure effective management of fraud risk based on prevention, detection and resilience.

The Fraud Protection Officer (FPO) is at the centre of fraud risk management and is responsible for defining both the Fraud Risk Management Policy and the fraud risk management standards.

He coordinates the fraud risk management activities and any investigations and is responsible for organising and leading the weekly Tactical Fraud Meeting with the control function players.

In July 2023, the Executive Committee decided to also centralise the monitoring of its sanctions decisions within the Fraud Protection Office.

In conjunction with the FPO, the IT component of internal and external fraud management is handled by the Information Security Officer (ISO) covered by the teams from the Non-Financial Management (NRM) unit, while the Inspection division housed in the Conduct & Controls unit is responsible for non-IT operational anti-fraud control and compliance with the code of conduct and regulatory constraints.

6.3.11 Conduct risk

6.3.11.1 Definition

Conduct risk is reflected in the loss of reputation or sanction risk arising from failure to comply with the provisions of the Spuerkeess Staff Code of Conduct.

6.3.11.2 Conduct risk governance

This is an integral part of fraud risk management and is ensured by non-IT operational anti-fraud control and compliance with the code of conduct and regulatory constraints within the Conduct & Controls unit.

The Spuerkeess Staff Code of Conduct:

- informs staff of the rules and values to be respected in the performance of their duties;
- highlights our bank's values and conveys its image and principles;
- unites all staff in a common set of values.

6.3.11.3 Conduct risk management governance and approach

The Inspection division within the Conduct & Controls unit carries out controls to detect misconduct by using patterns of fraud established based on actual experience and on the activities' residual risks.

The Inspection division works closely with the 1LoD units, for example the HR & People Management unit, to monitor compliance with aspects of the code of conduct.

At the same time, suspicious activity reports, customer complaints and whistleblower reports can trigger analyses and internal investigations.

The activity and the key figures used by the Inspection division are reflected in their contribution to the Risk Appetite Framework (RAF) through quarterly reports as well as in the activity report prepared by the Fraud Protection Officer and sent to the Compliance Committee and the Audit and Compliance Committee.

6.4 Capital and liquidity adequacy analysis

6.4.1 Internal Capital Adequacy Assessment Process (ICAAP)

The Group's parent company pays particularly close attention to its capital management, which is a key factor in its financial stability. It ensures it has enough capital to develop its business and withstand an adverse economic environment. The capital allocated to the Group's different business lines is appropriate to the Group's parent company's risk profile. Risk identification, the result of an ongoing process, allows material vulnerabilities to be incorporated into the economic capital allocation.

As part of the ICAAP exercise, the Group's parent company develops a multi-year projection, over three years, for the change in regulatory capital, in order to evaluate the impact on the regulatory ratios of at least two macroeconomic scenarios. To supplement these normative perspectives, a one-year economic perspective is developed to present an economic capital allocation in accordance with internal methodologies while taking account of material risks.

The economic quantification of the different risks is based on a conservative vision, with a confidence level of 99,95%. Internal methodologies have been developed to precisely measure all of the Group's parent company's material risks. The latter may result in an increase in capital requirements or have an impact on economic capital.

6.4.2 Internal Liquidity Adequacy Assessment Process (ILAAP)

The Group's parent company's business model means that it is exposed to liquidity risk. The transformation of short-term deposits into long-term credit creates a significant maturity mismatch between assets and liabilities. The main source of the Group's parent company's financing, namely retail customer deposits, often has no contractual maturity, which means the Group's parent company is exposed to a contractual liquidity gap.

As part of the ILAAP process, the Group's parent company adopts a robust financing plan to guarantee the financial stability of the Group's parent company and the fulfilment of its strategic objectives.

In the normative perspective, a number of the indicators used to measure liquidity risk are projected over a three-year horizon using at least two scenarios. In the economic perspective, an internal liquidity stress test is used to identify the impacts of the internal strategy and an adverse environment on the Group's parent company's liquidity.

These projections are used to ensure that the Group's parent company has the liquidity resources it needs in the face of adverse conditions.

6.4.3 ICAAP and ILAAP governance

The ICAAP and ILAAP processes are important instruments for the Group's parent company's risk management. A quarterly report is thus presented to and discussed within the Risk Management Committee and the Risk Committee. The ICAAP and ILAAP processes are used by the Group's parent company to analyse the impacts of strategic changes and multi-year budget forecasts.

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 four major segments, each with comparable profitability and risk characteristics. Spuerkeess also owns stakes in companies in Luxembourg, which are included in a separate segment.

The Group's parent company has adopted a pillar-based management view determined by the main customer segments. This view makes it possible to monitor the Group's parent company's strategic and business objectives and provide the best possible support to different types of customers.

The segments break down as follows:

- Retail Banking and Private Banking:
  This segment comprises the activities of the Retail and Private pillars and covers all of the Group's parent company's retail customers:
  - The Retail pillar consists of the branch network, with deposit-taking, loan distribution, advice on housing, investments and private pensions, and management of means of payment for retail customers, self-employed professionals and small businesses. These products and services are sold through the branch network, by Spuerkeess Direct, and through the digital channels that serve Spuerkeess's customers;
  - The Private pillar manages relationships with customers who have purchased one of the execution-only investment, investment advice or discretionary management solutions. These products and services are sold by dedicated Private Banking advisors at both the head office and Spuerkeess's finance centres.

- Corporate, Public Sector and Institutional Client Banking:
  This segment comprises the activities of the Corporate, Institutional and Public Sector pillars and thus covers all business customers:
  - The Corporate pillar manages relationships with business customers, which are categorised as either large companies or small and medium-sized companies. Specialised teams provide services to these customers in respect of loans and credits, investing, leasing and other financial advice;
  - The Institutional pillar manages relationships with institutional customers, investment funds, banks and other financial intermediaries, insurance and reinsurance companies,

financial companies and private equity and multi-family office entities. The institutional client relationship managers are the key contacts for these customers;

- o The Public Sector pillar manages government customers, other public sector entities and regional and local administrations. This pillar also covers relationships with the embassies of other countries located in Luxembourg.

- Financial Markets:

  This segment comprises the activities of the Financial Markets and ALM pillars:

  - o The Financial Markets pillar covers the money market position management activity as well as management of the inventory of all securities held by Spuerkeess (the Collateral Management component). This pillar also manages the Global Credit Investment activity, i.e. management of Spuerkeess's investment portfolio through bond investments. Alongside these Spuerkeess proprietary trading activities, the pillar covers a broad range of services such as financial instrument order execution (equities, bonds and derivatives), as well as foreign-exchange transactions for customers in other segments;
  - o The ALM pillar covers Spuerkeess's Asset and Liability Management activity, which involves quantifying and managing interest rate risk (IRRBB), structural liquidity risk and balance sheet balances.

- Investments and Corporate Center:

  This segment comprises income from investments, whether or not they are consolidated, Spuerkeess's own activities that cannot be allocated to customers in other pillars, such as the gains from sales of buildings and other income, as well as Management and secretary general overheads.

7.2 Allocation rules and net bank margin

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

The internal transfer pricing system (FTP) reflects the transfer of interest rate risk and liquidity risk which are assumed by Spuerkeess's ALM unit. This entity is responsible for interest rate risk and liquidity risk management and for asset/liability management for Spuerkeess as a whole.

Back-office department, support activity and overhead costs are rebilled to the different pillars using an activity-based costing 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) consists of these main products:

- deposits from Retail customers, Private Banking, and Corporate, Public Sector and Institutional Client Banking;
- loans and advances to Retail customers, Private Banking, and Corporate, Public Sector and Institutional Client Banking;
- other products for Retail customers, Private Banking, and Corporate, Public Sector and Institutional Client Banking;
- other products.

31/12/2023 In thousands of euros	**Retail Banking and Private Banking**	**Corporate, Public Sector and Institutional Client Banking**	**Financial Markets**	**Investments and Corporate Center**	**Total**
Net interest margin	500.544	231.533	4.771	45.766	782.614
Income from securities	-	-	-	45.643	45.643
Fee and commission income	100.635	68.635	1.396	22.636	193.304
Income from financial instruments and foreign exchange	3.736	13.828	24.233	11.368	53.165
Net Banking Income	**604.915**	**313.996**	**30.400**	**125.414**	**1.074.726**
Other operating income and expenses	-	-	-	13.086	13.086
Banking income	**604.915**	**313.996**	**30.400**	**138.500**	**1.087.811**
General administrative expenses plus valuation allowances in respect of intangible and tangible assets	-292.112	-113.810	-24.308	-40.335	-470.565
Net allowances for valuation and impairment	-56.525	-78.351	2.069	89	-132.719
Income from associates	-	-	-	48.159	48.159
Income before tax	**256.277**	**121.835**	**8.161**	**146.413**	**532.687**
Tax on income for the period and deferred taxes	-45.724	-21.738	-1.253	-12.583	-81.299
Minority interests	-	-	-	-2.117	-2.117
Income for the year attributable to equity holders of the parent	**210.553**	**100.097**	**6.908**	**131.713**	**449.271**
Assets	**19.281.132**	**7.504.652**	**27.844.103**	**1.554.509**	**56.184.395**
Liabilities	**24.886.898**	**20.877.134**	**8.184.828**	**2.235.536**	**56.184.395**

31/12/2022 In thousands of euros	Retail Banking and Private Banking	Corporate, Public Sector and Institutional Client Banking	Financial Markets	Investments and Corporate Center	Total
Net interest margin	305.299	103.591	71.036	8.322	488.248
Income from securities	-	-	-	35.997	35.997
Fee and commission income	108.222	66.486	3.187	22.843	200.739
Income from financial instruments and foreign exchange	3.826	24.097	-11.547	-5.578	10.798
Net Banking Income	**417.347**	**194.175**	**62.676**	**61.584**	**735.781**
Other operating income and expenses	-	-	-	11.273	11.273
Banking income	**417.347**	**194.175**	**62.676**	**72.857**	**747.054**
General administrative expenses plus valuation allowances in respect of intangible and tangible assets	-265.442	-85.956	-20.810	-75.352	-447.560
Net allowances for valuation and impairment	-22.447	-29.294	-2.072	-8.312	-62.125
Income from associates	-	-	-	182.491	182.491
Income before tax	**129.457**	**78.924**	**39.793**	**171.685**	**419.859**
Tax on income for the period and deferred taxes	-31.560	-19.241	-9.701	15.982	-44.520
Minority interests	-	-	-	-2.212	-2.212
Income for the year attributable to equity holders of the parent	**97.897**	**59.683**	**30.092**	**185.455**	**373.128**
Assets	**19.384.280**	**7.083.886**	**28.234.423**	**1.378.841**	**56.081.430**
Liabilities	**23.183.018**	**22.788.102**	**7.890.697**	**2.219.614**	**56.081.430**

Contribution by product to net bank margin:

in thousands of euros	31/12/2022	31/12/2023
Deposits from retail and private customers	117.604	324.539
Loans and advances to retail and private customers	218.410	194.954
Other products for retail and private customers	81.333	85.422
Deposits from corporate, public sector and institutional customers	53.816	160.238
Loans and advances to corporate, public sector and institutional customers	77.080	81.766
Other products for corporate, public sector and institutional customers	63.279	71.993
Other products	124.260	155.814
Total Net Bank Margin	**735.781**	**1.074.726**

Income before tax for the Investments and Corporate Center segment factors in the share in the profit of equity-accounted associates, in addition to the revenue included in net bank margin. The "Income for the year attributable to equity holders of the parent" line was positively affected by a deferred tax effect related to expenses included in the Corporate Center segment for financial year 2022.

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

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 2023

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

SUPERVISORY COMMISSIONER

Bob Kieffer

EXECUTIVE COMMITTEE AS AT 31 DECEMBER 2023

CHAIRMAN	Françoise Thoma	Chief Executive Officer
MEMBERS	Aly Kohll	Deputy Chief Executive Officer
	Romain Wehles	Executive Vice President
	Doris Engel	Executive Vice President
	Olivier Wantz	Executive Vice President

STATUTORY AUDITOR

Ernst & Young, Public Limited Company, Luxembourg

Approved by the Board of Directors during its meeting of 27 March 2024.

Luxembourg, 27 March 2024

For the Board of Directors

Camille Fohl
Chairman