SOCIETE GENERALE LUXEMBOURG

PILLAR 3 2020

RISK REPORT

SOCIETE GENERALE

Societe Generale Luxembourg
11 Avenue Emile Reuter
L-2420 Luxembourg

Pillar 3 on 31 December 2020 positions

R.C.S. Luxembourg: B 006.061

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FOREWORD

The purpose of this Report is to provide Pillar 3 disclosures for Societe Generale Luxembourg (hereafter "SG Luxembourg" or "the Group") as required by the regulatory framework for capital & liquidity pursuant to Part Eight of the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation, or "CRR").

In line with Article 13 (1) from the CRR, significant subsidiaries and those subsidiaries which are of significance for their local market are required to disclose information to the extent applicable in respect of own funds, capital requirements, capital buffers, credit risk adjustments, remuneration policy, leverage and use of credit risk mitigation techniques on an individual or sub-consolidated basis. Being of a part of Société Générale Group (hereafter "SG Group"), SG Luxembourg has been identified as significant subsidiary for the Group and hence required to provide additional disclosure requirements in accordance with Article 13 from the CRR.

The information presented in this document gives a comprehensive description of Societe Generale Luxembourg's Risk Management organisation, along with a quantitative and qualitative overview of Societe Generale Luxembourg's risk exposure at year-end 2020. In addition, the Pillar 3 disclosure report also includes the information on:

- The European Banking Authority (EBA) Guidelines on disclosure of encumbered and unencumbered assets (EBA/GL/2014/03);
- The Commission Implementing Regulation (EU) 1423/2013 laying down implementing technical standards with regard to disclosure of own funds requirements for institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council;
- The European Banking Authority (EBA) Guidelines on materiality, proprietary and confidentiality and on disclosure frequency under Articles 432(1), 432(2) and 433 of Regulation (EU) No 575/2013 (EBA/GL/2014/14);
- The Commission Delegated Regulation (EU) 2015/1555 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for the disclosure of information in relation to the compliance of institutions with the requirement for a countercyclical capital buffer in accordance with Article 440;
- The Commission Implementing Regulation (EU) 2016/200 laying down implementing technical standards with regard to disclosure of the leverage ratio for institutions, according to Regulation (EU) No 575/2013 of the European Parliament and of the Council;
- The European Banking Authority (EBA) Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013 (EBA/GL/2016/11);
- The European Banking Authority (EBA) Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 of Regulation (EU) No 575/2013 (EBA/GL/2017/01);
- The European Banking Authority (EBA) Guidelines on disclosure of non-performing and forborne exposures (EBA/GL/2018/10);
- The European Banking Authority (EBA) on supervisory reporting and disclosure requirements in compliance with the CRR 'quick fix' in response to the COVID-19 pandemic (EBA/GL/2020/11).

Following paragraph 32 from EBA/GL/2016/11, SG Luxembourg has decided to publish the Pillar 3 disclosure report on an annual basis on its website. This reflects its status as a subsidiary of SG Group where a significant number of clients and counterparties are directly exposed to both SG Luxembourg and SG Group and therefore they would mainly rely on the SG Group disclosures. In addition, the risk processes are aligned between SG Luxembourg and SG Group.

1. KEY FIGURES

The risk report provides in-depth information on the approach and strategy for managing its equity capital and risks of Societe Generale Luxembourg.

The report also aims to meet the requirements of various stakeholders, including regulators (in compliance with Part 8 of the CRR), investors and analysts.

SUMMARY PROFIT AND LOSS[1]

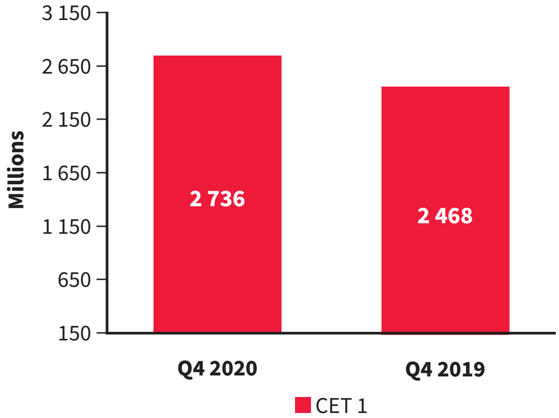
(in EUR thousand)	31 December 2020	31 December 2019
Net banking income	686 571	744 992
Cost of risk[2]	(63 934)	7 497
Net income for the period	229 774	283 445

SUMMARY BALANCE SHEET[1]

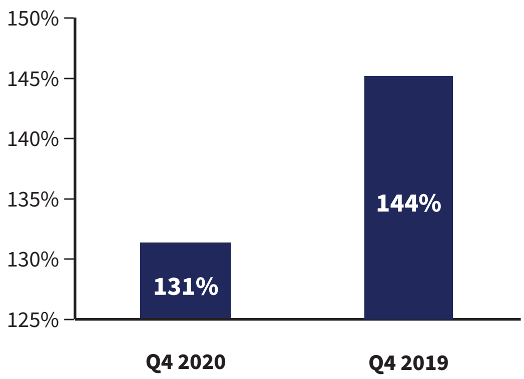
(in EUR thousand)	31 December 2020	31 December 2019
Total Assets	56 049 652	117 040 600
Total Liabilities	52 737 121	113 961 818
Total Equity	3 312 531	3 078 782

2020/2019 main variation in assets and liabilities results from SGIS change in consolidation method from full consolidation to equity method (Please refer to section 3.2)

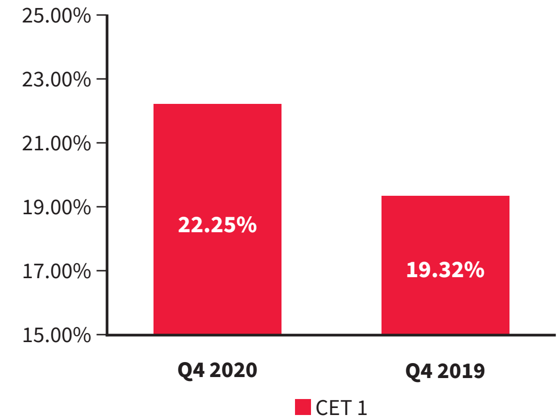
OWN FUNDS



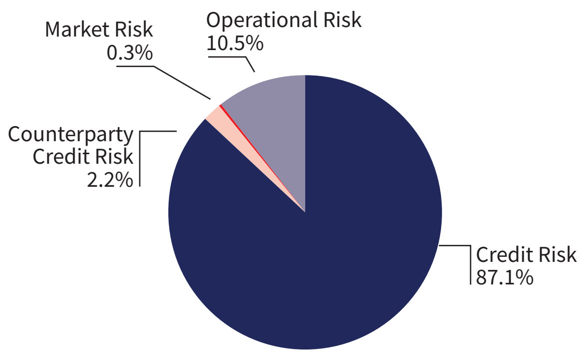
LCR RATIO



SOLVENCY RATIO



RWA BY RISK TYPE



1 As per consolidated financial statements.

1.1 COVID-19 CRISIS IMPACT ON RISKS MANAGEMENT

The Covid-19 pandemic is causing a health crisis and an economic shock of historic proportions. The containment measures imposed by many governments to stop the spread of virus have led to a collapse of global activity during 2020: the crisis is affecting both the supply of goods and services through containment measures and demand through declining corporate and household incomes.

Governments and central banks have massively intervened to mitigate the effects of this shock by providing significant support in term of liquidity and credit guarantees to the economy.

High uncertainties remain about the consequences, magnitude and duration of the crisis.

In terms of credit risk, we noted an increase of margin shortfalls for Private Banking's Lombard activity (in the three entities) mainly during the 1st quarter 2020.

On corporate credit side, the portfolio monitoring was strengthened to closely identified creditworthiness degradation of our counterparties with increased frequency of the follow up (de-notching, Watch list, waivers…).

Regulars meetings were held with Authorized Management and Head of Business Units to present an updated overview of the situation and the more risky cases.

Risk division has also performed several projections of net cost of risk (NCR) during the year in order to have the best estimation of the impacts of the crisis on SGL's profitability. During the year, the NCR (on consolidated level) has increased, at 64 M€, mainly on PRIV and GLBA/SSL activities, but maintained at a reasonable level of 15bp.

On a consolidated basis, Société Générale Luxembourg has authorized moratoria's on limited cases, mainly on Private Banking activities.

In terms of operational risk (including IT security), Risk Division has conducted a global review of the processes and the control framework. The survey has been performed with BU/SU managers and operational risk managers within SG Luxembourg, Monaco and Switzerland on the modification of their activities and the associated levels of control in the context of COVID crisis.

Main conclusions are:

- The majority of activities has been maintained without degradation of the control environment
- The Adjustment of activities to the processing of remote operations (standardization of instructions, mailing list, restriction of authorizations...)
- The Increased environmental risk (screenshots, information sharing, and access to static client data)

The amount of operational losses stay under Risk Appetite limit excepted for Q1 2020, due to a new provision in SG Private Banking Switzerland regarding a litigation case (not linked to COVID crisis).The COVID crisis management cost EUR 0.41 million for SGL Group (include SGPB Suisse and Monaco). Furthermore, market volatility related to the COVID crisis in Q2 generated delays, and errors in order processing for EUR 0.55 million especially on SGSS (EUR 0.52 million).

In terms of management, the Crisis cell has been activated since the 25th February in order to manage COVID-19 crisis. The cell, chaired by the COO of SG Luxembourg, member of the Authorized Management, held at least once a week with regular exchanges with Executive Committee and Authorized Management.

The dedicated positions on our recovery site were used from February to June and from October to December 2020. Remote access has been activated from 16 March 2020 gradually to allow vital and critical activities to work first and then for all staff.

However, we recorded an average of 40 on-site employees during the first lockdown to carry out activities that could not be performed remotely.

The level of on-site presence has evolved during the year (between 25 and 50%) according to the health situation and the directives and recommendations issued by the Luxembourgish Authorities (Government, CSSF and ASTF).

In terms of market risk and ALM risk, impacts of the crisis remained very limited.

The liquidity and structural positions of SG Luxembourg were not affected by the Crisis.

On market risk side, the level of risk was still very low and far below limits in place.

A regular report, on consolidated basis, and notably regarding credit and operational risk has been put in place since March (weekly and after bi monthly) for the Management of SGL and our Regulator, the CSSF.

2. GOVERNANCE AND RISK MANAGEMENT ORGANIZATION

In accordance with Regulation CRR 575/2013 of the European Parliament and of the Council dated 26 June 2013 and with the CSSF circular 17/673, this report, published under the responsibility of Societe Generale Luxembourg Group Authorised Management, sets out the quantitative and qualitative information required on own funds and risk management within SG Luxembourg Group, to ensure transparency vis-à-vis market players. This information has been prepared in compliance with the internal control procedures approved by the Board of Directors in the course of the validation of the SG Luxembourg Group Risk Appetite Framework and SG Luxembourg Group Risk Appetite Statement.

SG Luxembourg Group is part of Société Générale Group (SG Group) and as such SG Luxembourg risk profile is integrated into the monitoring performed by SG Group. The risk profile and governance of SG Group is detailed in a separate Pillar 3 report published on the website of SG Group. On a consolidated basis, exposures towards SG Group represent about 36% of total exposures which in the various tables of Chapter 4 Credit Risk primarily relate to exposures to “Institutions”.

2.1 INTRODUCTION

A strong risk culture is an integral part of the corporate culture. The identity of SG Group and SG Luxembourg Group are built around four values: teamwork, innovation, commitment and responsibility. The SG Luxembourg Group strives for all staff to adopt these values and conduct their business with ethics and responsibility. These elements of culture and expected behaviours are criteria incorporated into the entire HR process (recruitment, performance assessment, promotion, compensation, penalties, etc.). The notion of risk specific to a function is explicitly included in each job description sent to employees and is emphasized when setting objectives.

2.2 TYPES OF RISKS

SG Luxembourg Group’s business model involves the following main risk categories:

- **Credit and counterparty risk (including concentration effects)** is the risk of losses arising from the inability of customers, issuers or other counterparties to meet their financial commitments. Credit risk includes the counterparty risk linked to market transactions and securitization activities. In addition, credit risk may be further amplified by individual, country and sector concentration risk.
- **Market risk** is the risk of a loss of value on financial instruments arising from changes in market parameters, the volatility of these parameters and correlations between them. These parameters include but are not limited to exchange rates, interest rates, and the price of securities (equity, bonds), commodities, derivatives and other assets.
- **Operational risk** is the risk of losses resulting from inadequacies or failures in processes, personnel or information systems, or from external events.
- **Structural interest and exchange rate risk** is the risk of losses of interest margin or of the value of the fixed-rate structural position due to changes in interest or exchange rates. Structural interest and exchange rate risks arise from commercial activities and from corporate centre transactions.
- **Liquidity risk** is the inability to meet financial obligations at a reasonable cost. Funding risk is the risk of being unable to finance the development of activities in line with commercial objectives and at a competitive cost.
- **Non-compliance risk** (including legal and tax risks) is the risk of court-ordered, administrative or disciplinary sanctions, or of material financial loss, due to failure to comply with the provisions governing activities.

- **Reputational risk** is the risk arising from a negative perception on the part of customers, counterparties, shareholders, investors or regulators that could negatively impact the ability to maintain or engage in business relationships and to sustain access to sources of financing.
- **Risks related to insurance activities:** through its reinsurance subsidiary (SG Re), SG Luxembourg is exposed to risks related to this business, mainly balance sheet management risks (interest rate, valuation, counterparty and foreign exchange risk).

2.3 RISK APPETITE

Risk appetite is the level of risk that SG Luxembourg Group is prepared to bear in the course of pursuing its strategic objectives. It is formalised in the risk appetite statement document, which describes the principles, policies and metrics that set the risk appetite. The definition of the risk appetite framework and how to adapt it are under the oversight of the Authorised Management. The Authorised Management regularly ensures compliance with the risk appetite framework and is responsible for ensuring the effectiveness and integrity of the risk appetite implementation mechanism.

The SG Luxembourg's Board of Directors approves annually the risk appetite governance, implementation and adaptation mechanism. The Board is regularly informed through the Risk and Compliance Committee of the risk appetite framework and whether the mechanism is operating appropriately based on periodic assessments by the Internal Audit Division. The Board also sets the compensation of the Authorised Management and decides on the principles of the compensation policy, in particular for regulated persons whose activities may have a significant impact on the bank's risk profile and ensures that they are in keeping with risk management objectives. The risk appetite exercise is shared with the various business lines and performed in a manner consistent with objectives, budget procedures and limits. It is also shared with the Finance and Risk Divisions of SG Group. The scope of the risk appetite framework matches the consolidated prudential scope in force for establishing its various regular disclosures to the ECB and the CSSF. Risk appetite in relation to the major risks to which SG Luxembourg Group is exposed is regulated by limits and thresholds. These metrics aid in reaching financial targets and orienting the profitability profile.

2.4 RISK MAPPING FRAMEWORK AND STRESS TESTS

The risks to which SG Luxembourg Group is exposed are each covered by measurement elements standardized at SG Group level and/or by regulations. The Risk Division's information system for monitoring loans relies on a regular reconciliation of commitments, collateral and internal credit limits. This credit risk architecture is regularly upgraded and maintained according to the project and development maintenance catalogues of the Risk Division to ensure risk monitoring and regulatory requirements. The liquidity and exchange rate risk monitoring mechanism, which is based on SG Group reporting tools and calculators, is linked to the same architecture to ensure consistency between the risk and finance functions and the managed indicators. Oversight of operational risk is primarily provided via the use of an SG Group community tools for entering, reporting and consolidating information, including incidents, permanent monitoring and action plans.

Stress tests or crisis simulations are used to assess the potential impact of a downturn in activity on the behaviour of a portfolio, activity or entity. They are used to help identify, assess and manage risk, and to evaluate SG Luxembourg Group's capital adequacy with regard to risks.

In the context of the budget, Société Générale Group performs annually, in November, a stress test exercise (referred to "Budget global stress" or "stress global du budget" in French) aiming at assessing the resilience of Société Générale Group in a plausible but severe scenario in which all the risks would not materialize simultaneously.

In the 2021 budget year, Société Générale Group used models of projected income to estimate, under stress, the commissions and income from investment banking customers. These models had already been tested during the 2019 EBA stress test exercise and have continued to be improved since then taking account of the feedback from business experts.

SG Luxembourg Group stress test (balance sheet, net banking income and risk weight assets impacts) has been built on the basis of Société Générale Group stress test by businesses considering some adjustments reviewed with the businesses (both in Luxembourg and at the Société Générale Group level).

As such, the stress test framework in place is part of preparing SG Luxembourg Group's Risk Appetite and Internal Capital Adequacy Assessment Process (ICAAP). It is used in particular to check SG Luxembourg's compliance with prudential ratios. It covers all of SG Luxembourg Group's activities and is based on two global three-year-horizon macroeconomic scenarios: a core budgetary macroeconomic scenario and a macroeconomic scenario of severe but plausible stress extrapolated on the basis of the core scenario. Each scenario is developed for a large number of countries or regions and incorporates a series of economic and financial variables. Each global scenario is consistent on two levels: consistency between national scenarios and consistency of trends in national aggregates for each individual country.

The core scenario is meant to represent the most likely course of events at the time of its formulation. It is developed on the basis of a series of observed factors, including the recent economic situation and trends in economic (budgetary, monetary and exchange rate) policy. Based on these observed factors, economists determine the most likely trajectory for the economic and financial variables over a given time frame.

The stressed scenario is intended to simulate a loss of business (based on real GDP figures) deviating from the core scenario, on a scale similar to that observed during a past baseline recession chosen for its severity. It is a systematic stress scenario, meaning it is constant in scale from one period to the next, whatever the trajectory forecast by the core scenario, as long as the baseline recession remains constant. The stress scenario is also generic, in that its triggering event is not specified. The impact of the stress scenario on the other economic and financial variables is determined by measuring its deviation from the core scenario.

The stress scenario takes effect starting in 2021 and assumes an extended health crisis coupled with a generic shock including global financial crisis. GDP deviates from the trajectory of the central scenario during four consecutive years (with all countries facing the same intensity of the GDP shock).

The cumulative loss partly matches the GDP losses observed during the Global Financial Crisis of 2008/2009. It has been further adjusted to take account of the Covid-19 shock episode based on present knowledge.

The stress scenario illustrates the materialization of threats to stability present in the current global economic environment and models a persistent crisis. The global economic downturn reflects the combined influences of higher unemployment, lower investment and growing debt ratios. The fall in global demand also leads to lower international trade, aggravated by protectionist policies, and a new downturn in commodity prices, placing stress on producer nations. Contrary to the 2008-2009 crisis, the political environment will make it difficult for the G20 and international organisations to deliver a coordinated response to the crisis.

The fall in activity is exacerbated by a global financial shock, thus translating into further scarring and a slower recovery. The highly uncertain environment would send yields of safe assets to unprecedented low levels and the repricing risk would be heightened as underlying fundamentals are particularly weak.

Higher uncertainty and flight to quality would supported the dollar in short term. The Japanese yen would also be a bit stronger. As a result of the negative impact of Brexit on UK fundamentals, Sterling Pound would be depreciated. It would plunge below parity against the euro on the back of a disorderly divorce with the EU.

2.5 RISK PLAYERS AND MANAGEMENT

Two main high-level bodies govern SG Luxembourg risk management: the Board of Directors and the Authorized Management.

Within the Board of Directors:

- The Risk Committee advises the Board of Directors on overall strategy and the appetite regarding all kinds of risks, both current and future, and assists the Board when it verifies the implementation of this strategy.,
- The Audit and Accounts Committee ensures that the risk control systems operate effectively.

Chaired by the Authorized Management of SG Luxembourg, the Executive Committees responsible for central oversight of internal control and risk management are as follows:

- **The Risk Committee (CORISQ)** its mission is to define the Group's key priorities in terms of risk (credit, country, market, structural and operational risks), within the framework of the risk appetite and the financial targets set by the Board of Directors of the Group, and to monitor compliance in such respect; and to maintain a sound, effective and sustainable risk management framework, taking appropriate measures in case of gaps;
- **The Finance Committee (COFI)** is responsible for setting out the Group's financial strategy and for managing scarce resources (capital, liquidity, statement of financial position) in the context of the allocation and the management of structural risks; it also addresses tax-related matters. The ALM Committee, a sub-committee of the COFI, validates the structural risk upon proposal from DFIN and RISQ;
- **The Compliance Committee (COMCO)** the mission of this committee is to define the Group's main guidelines and principles in terms of compliance, to ensure a sound, effective and sustainable adherence to all regulations to be applied by the Group based on an appropriate framework, and to take appropriate measures in case of gaps;
- **The IS Security Committee (ISSC)** which defines and follows SG Luxembourg Group's: security policy strategy and governance, data leakage, security and security incidents reporting, prioritization of actions based on risk assessments, optimization of capital allocated to Information Security and all other areas essential to the management of security policy. It also ensures consistency with SG Group projects and the defined SG Group strategy.

- **The SG Luxembourg Group Internal Control Coordination Committee (ICCCG)** this committee is responsible for the overall architecture of the Group's internal control system, for evaluating its efficiency, consistency and comprehensiveness, for taking corrective actions and for monitoring their implementation;
- **The Responsible Commitments Committee (CORESP)** deals with topics related to the Group's commitments and normative framework in CSR (including CSR sectoral policies), culture and conduct, or other topics that have an impact on the Group's liability and not already covered by an existing committee

DIVISIONS IN CHARGE OF RISK MANAGEMENT:

The Group's Corporate Divisions, which are independent from the core businesses, contribute to the management and internal control of risks. The Corporate Divisions provide the Group's Authorized Management with all the information needed to perform its role of managing Group strategy under the authority of the Chief Executive Officer. The Corporate Divisions report directly to Authorized Management.

- **The Risk Division** whom main responsibilities are to contribute to the development of SG Luxembourg's activities and profitability by defining its risk appetite (broken down by business) under the aegis of the Authorized Management and in collaboration with the Finance Division and Core Businesses, and to establish a risk management and monitoring system. In exercising its functions, the Risk Division reconciles independence from the business lines and close cooperation with the Core Businesses, which bear primary responsibility for the transactions that they initiate. Accordingly, the Risk Division oversees the risk function hierarchically or functionally.

  The Risk Division manages:

  - Credit risk through a process shared across all business units that ensures the authorisation of risk taking and controls of the risk. The main components of this mechanism are a prior analysis of the risk by a credit risk monitoring unit followed by an approval process procedure of any risk taking, and complemented by daily, monthly and quarterly reviews of compliance with risk taking limits and the suitability of collateral;
  - Operational risk through a second-level of supervision which defines, challenges and controls the first line of defence which is part of business lines. A set of indicators and exercises guarantees the resilience of the bank: an annual exercise aimed at risk assessment and mapping, a set of key risk indicators; a mechanism for collecting and tracking operational risk incidents; a crisis management and business continuity mechanism;
  - Market risk through the daily monitoring of risk metrics (primarily the Value at Risk and Stressed Value at Risk) in order to ensure exposures remain within limit levels approved by the bank's Board;
  - Supervision of ALM Risk (IRRBB Risk and Liquidity Risk) as second line of defense.

- **The Compliance Division is responsible for:** compliance and ensures that banking and investment activities are compliant with all laws, regulations and ethical principles applicable to them. It also manages reputational risk. Compliance risk management includes dedicated procedures related to:
  - Anti-money-laundering and terrorism financing (including S&E issues): compliance with the regulatory provisions relative to anti-money laundering and terrorist financing. In addition, the Bank is exposed to risks in connection with the Sanctions-Embargos regulations due to its international clientele, cross-border operations and, in particular, USD transactions of its clientele.
  - ABC& Ethics and Conduct (ABC, CSR): various thematic linked to the personal ethics and fight against bribery and corruption. Corruption and bribery include the relevant offences domestic bribery (private to public), domestic bribery (private to private) and corruption of foreign public officials.
  - Client protection: risk related to the functioning and the transparency of financial markets, and the provision of a better protection to financial services customers (including MiFID 2 regulation).
  - Market integrity: this risk refers to a broad set of deceptive practices and incorporates three categories of predicate offence namely "Fraud and Forgery", "Insider Trading" and "Market Manipulation".
  - Tax transparency: risk related to tax evasion and avoidance. Tax Fraud includes the deliberate concealment of the ownership of assets, income and gains or otherwise fraudulent conduct designed to divert money from the public revenue for which is owed.
  - Data protection: risks related to the protection of personal data of customers and employees (GDPR regulation)

Furthermore, the compliance function is in charge of overseeing the annual assessment of exposure to compliance risks, which consists of a granular assessment of intrinsic regulatory risks and the means implemented to bring them under control. This assessment is supplemented by an annual risk assessment exercise related to sanctions and embargoes.

- **The Finance Division is in charge of:**
  - Liquidity and refinancing risk: Various indicators are produced to track liquidity risk and thereby ensure that the risk assumed remains consistent with the framework set by management. These indicators cover different aspects of liquidity risk management: independence from financing not related to commercial activity, the business-as-usual liquidity situation, and liquidity in a period of stress. These indicators are enforced either by regulatory limits (to which SG Luxembourg adds a safety buffer) or by internal limits, discussed and set jointly by the central teams. Likewise, the ALM behavioral models for liquidity and interest rates are reviewed annually and centrally validated by those same teams. Oversight of the indicators is provided by teams including ALM and cash flow. Level 1 control is provided by a local team. Level 2 control is carried out jointly by the SG Luxembourg Group Risk Division and the SG Group Finance Division.

   - Interest rate risk and foreign exchange risk: interest rates and foreign exchange risk influence assets and profitability, as markets exhibit fluctuations. In the SG Luxembourg Group, the monitoring of interest rate risk and foreign exchange risk is centrally delegated to two different teams based on whether the transactions are categorised as structural or market.
- **The General Secretary brings:**
   - The Group Legal Department, which ensures in particular the security and legal regularity of the Group's activities, drawing on the legal services of subsidiaries and branches where applicable,
   - The Group Tax Department, which ensures compliance with tax laws in France and abroad,
   - The Group's Corporate Department, which provides the Group's central administration services and provides support, as necessary, to the Secretary of the Board of Directors;
- **The Human Resources and Communication Division** monitors the implementation of compensation policies, amongst other things;
- **The Corporate Social Responsibility Department**, which is in charge of defining and proposing a policy in favor of Corporate Social Responsibility within the Group;
- **The Group Security Department**, which oversees the Group's security in conjunction with the Service Unit of the Resources and Digital Transformation Department regarding the security of information systems;
- **The Group Internal Audit** is in charge of internal audits and reports too to the Head of Group SG Internal Audit.

2.6 INTERNAL CONTROL

Internal control is part of a regulatory framework, the Basel Committee has defined four principles – independence, universality, impartiality, and sufficient resources – which must form the basis of internal control carried out by credit institutions. These principles are completed by EBA's recommendations and CSSF's circulars.

Within SG Luxembourg Group, these principles are applied through directives, procedures, instructions and dedicated committees defined at SG Luxembourg Group level to comply with all regulatory requirements. Coherence is ensured with the general framework defined by SG Group's internal control, the SG Group Audit Charter, and other frameworks relating to the management of credit risks, market risks, operational risks, structural interest rate, exchange rate and liquidity risks, compliance control and reputational risk control.

Control is based on a body of standards and procedures.

All SG Luxembourg Group's activities are governed by rules and procedures covered by a set of documents referred to collectively as the "Normative Documentation". This documentation includes any documents:

- setting forth rules for action and behaviour applicable to staff;
- defining the structures of the businesses and the sharing of roles and responsibilities;
- describing the management rules and internal procedures specific to each business and activity.

The internal control system is represented by all methods, which ensure that the operations carried out and the organisation and procedures implemented comply with:

- legal and regulatory provisions;
- professional and ethical practices;
- the internal rules and guidelines defined by the Authorised Management.

The internal control system is organised according to the "three lines of defence" model in accordance with the texts of the Basel Committee:

- The first line of defence includes all employees and operational management, both within the businesses and in Corporate Divisions (in the latter case, with respect to their own operations).

Operational management is responsible for risks, their prevention and their management – by putting in place first-level of permanent control measures, among other things – as well as for implementing corrective or remedial actions in response to any failures identified by controls and/or process steering;

- The second line of defence is provided by the compliance, finance and risk divisions.

  Within the internal control framework, these functions are tasked with continuously verifying that the security and management of risks affecting operations are ensured, under the responsibility of operational management, through the effective application of established standards, defined procedures, methods and controls as instructed.

  Accordingly, these functions must provide the necessary expertise to define, within their respective fields, the controls and other means of risk management to be implemented by the first line of defence, and to oversee that they are effectively implemented; they conduct second-level permanent control over all of the risks, employing the controls they have established or that have been established by other expert functions (e.g. sourcing, legal, tax, human resources, information system security, etc.) and by the businesses;

- The third line of defence is provided by the Internal Audit Division. This division carries out internal audits that are strictly independent of the business lines and the permanent control function.

In order to coordinate the three lines of defence, two kinds of Internal Control Coordination Committee are in place formed under the Authorised Management of SG Luxembourg. These committees are decision-making body that eventually makes recommendations, initiates and follows action plans, and observations of inadequacy or dysfunction.

The objective of these Committees is to ensure the overall consistency of the control system by means of a cross-disciplinary approach to the topics.

These two types of Committees are:

- ICCC (Internal Control Coordination Committee) with a Business Unit/ Support Unit’s focus and,
- ICCCG (Internal Control Coordination Committee Group) with a global focus on SG Luxembourg/subsidiaries.

3. CAPITAL MANAGEMENT AND ADEQUACY

3.1 THE REGULATORY FRAMEWORK

The Basel Committee, mandated by the G20, defined the new rules governing capital and liquidity aimed at making the banking sector more resilient. The so-called Basel 3 rules were published in December 2010. They were translated into European law by a directive (CRD4) and a regulation (CRR) which entered into force on 1st January 2014.

The general framework defined by Basel 3 is structured around three pillars:

- Pillar 1 sets the minimum solvency requirements and defines the rules that banks must use to measure risks and calculate associated capital requirements, according to standard or more advanced methods;
- Pillar 2 relates to the discretionary supervision implemented by the competent authority, which allows them – based on a constant dialogue with supervised credit institutions – to assess the adequacy of capital requirements as calculated under Pillar 1, and to calibrate additional capital requirements with regard to all the risks to which these institutions are exposed;
- Pillar 3 encourages market discipline by developing a set of qualitative or quantitative disclosure requirements which will allow market participants to better assess a given institution’s capital, risk exposure, risk assessment processes and, accordingly, capital adequacy.

SG Luxembourg Group complied with the minimum ratio requirements applicable to its activities for the year 2020.

3.2 SCOPE OF APPLICATION – PRUDENTIAL SCOPE

SG Luxembourg amended the consolidation perimeter as follows:

- companies consolidated for the first time in 2020:
  - SG Leasing Luxembourg (formerly Nocaria investment S.A.)
  - Surya Invesments S.A. ("Surya")
- change of consolidation method of SGIS from full consolidation to equity method:
  - SG Issuer S.A. was a 100% owned subsidiary of SG Luxembourg until 30 November 2020. At this date, Société Générale Luxembourg S.A. sold 100 of its shares to Société Générale S.A. ("SG S.A.") and renounced to its voting rights on its remaining shares. As SG S.A. is the remaining shareholder with voting rights, it inherits the power and control over SGIS. Consequently, Société Générale Luxembourg S.A. has lost power and control on SGIS in accordance with IFRS 10.
  - Even if Société Générale Luxembourg S.A. does not fully consolidate SGIS, Société Générale Luxembourg S.A. keeps a significant influence on SGIS. Indeed, based on the existing significant economic relationships, the Group's supervision in Luxembourg and common workforce, SG Luxembourg exercises significant influence in accordance with IAS 28.
  - Therefore, SG Luxembourg accounts its interest in SGIS (99.8%) using the equity method as at 31 December 2020 SGIS still contributed to the consolidated profit and loss of SG Luxembourg Group from 1 January 2020 to 30 November 2020 and to the Net income from investment accounted for using the equity method for the month of December 2020.

The significant variation compared to the year of 2019, is related to the deconsolidation of SG Issuer S.A., please refer to Note 2.2.2. from the 2020 consolidated Financial Statements.

SG Luxembourg Group's prudential reporting scope includes all consolidated subsidiaries, with the exception of insurance subsidiaries, which are subject to separate capital supervision (see table 1).

TABLE 1: OUTLINE OF THE DIFFERENCES IN THE SCOPES OF CONSOLIDATION (EU LI3)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation	Description of the entity
SG Life Insurance Broker	Full consolidation	Neither consolidated nor deducted	Insurance entity
SG Ré	Full consolidation	Neither consolidated nor deducted	Insurance entity
Sogelife Luxembourg	Equity Method	Neither consolidated nor deducted	Insurance entity

The above table covers all entities where the accounting and prudential consolidation are different.

TABLE 2: DIFFERENCES BETWEEN ACCOUNTING AND REGULATORY SCOPES OF CONSOLIDATION AND THE MAPPING OF FINANCIAL STATEMENT CATEGORIES WITH REGULATORY RISK CATEGORIES (EU LI1)

(in EUR 1000)	**Carrying values as reported in published consolidated financial statements**	**Carrying values under scope of regulatory consolidation** *
Assets		
Cash and balances with central banks	9 871 682	10 245 355
Financial assets at fair value through profit or loss	1 057 591	1 107 642
Financial assets at fair value through other comprehensive income	3 205 031	3 205 031
Debt securities at amortised cost	7 086 422	7 086 422
Due from banks at amortised cost	10 498 243	10 124 570
Customers loans at amortised cost	22 980 536	22 980 528
Investment of insurances activities	442 651	–
Tax assets	4 781	4 781
Other assets	648 839	661 579
Investments accounted for using the equity method	99 419	19 339
Property and equipment and other intangible assets	154 457	154 456
Total assets	**56 049 652**	**55 589 704**
Liabilities		
Financial liabilities at fair value through profit or loss	534 905	534 905
Hedging derivatives	193 687	193 687
Debt securities issued	64 609	64 609
Due to banks	25 326 267	25 326 317
Customer deposits	24 995 893	25 030 124
Tax liabilities	156 068	39 937
Other liabilities	1 292 389	1 290 914
Insurance contracts related liabilities	91 623	–
Provisions	81 680	99 108
Total liabilities	**52 737 121**	**52 579 599**
Issued Capital	1 389 043	1 389 043
Reserves and retained earnings	1 658 308	1 384 006
Net income	229 774	210 374
Unrealised or deferred gains and losses	35 314	26 591
Non-controlling interests	92	92
Total equity	**3 312 531**	**3 010 106**
Total liabilities and equity	**56 049 652**	**55 589 704**

* Insurance companies are excluded from regulatory consolidation which explains differences on total of carrying values comparing with published financial statements.

3.3 REGULATORY CAPITAL

Reported according to international financial reporting standards (IFRS), SG Luxembourg Group's regulatory capital consists of the following components.

COMMON EQUITY TIER 1 CAPITAL

According to CRR/CRD4 regulations, Common Equity Tier 1 capital is made up primarily of the following:

- ordinary shares (net of repurchased shares and treasury shares) and related share premium accounts;
- retained earnings;
- components of other comprehensive income;
- other reserves;

Deductions from Common Equity Tier 1 capital essentially involve the following:

- estimated dividend payment;
- goodwill and intangible assets, net of associated deferred tax liabilities;
- unrealised capital gains and losses on cash flow hedging;
- any positive difference between expected losses on customer loans and receivables, risk-weighted using the Internal Ratings

Based (IRB) approach, and the sum of related value adjustments and collective impairment losses;

- value adjustments resulting from the requirements of prudent valuation;
- excess of deduction from T2 items in CET1 capital;

ADDITIONAL TIER 1 CAPITAL

SG Luxembourg Group has no additional Tier 1 capital.

TIER 2 CAPITAL

SG Luxembourg Group has no Tier 2 capital as the excess of deduction is reported in CET1 capital:

- IRB Excess of provisions over expected losses eligible;
- Deduction of T2 instruments of financial sector entities where the institution has a significant investment.

SOLVENCY RATIO

The solvency ratio is set by comparing SG Luxembourg group's equity with the sum of risk-weighted assets for credit risk and the capital requirement multiplied by 12.5 for market risks and operational risks.

Since 1st January 2014, the new regulatory framework sets minimum requirements to be met for the Common Equity Tier 1 (CET1) ratio and the Tier 1 ratio. They are expressed as a percentage of the risk-weighted assets and according to the split of own funds i.e.: Common Equity Tier 1 (CET1), Tier 1 (T1) or Total Capital (TC).

Every quarter, each ratio is calculated following the accounting closing and then compared to the supervisory requirements.

As of 31st December 2020, the Overall Capital requirements (OCR) to be made up of Common Equity Tier 1 capital (CET1) applicable to the SG Luxembourg Group was set to 8.61%. The breakdown of OCR to be made up of CET1 is the following:

- Minimum capital requirements for CET1 capital: 4.5%
- Pillar 2 requirements (P2R) for CET1 capital: 0.56%
- Capital conservation buffer: 2.5%
- Institution Specific Countercyclical capital buffer: 0.05%
- Other Systemically Important Institution buffer (O-SII): 1%

As part of Other Systemically Important Institution (O-SII), a discretionary specific systemic buffer is applicable to SG Luxembourg Group (art.59-9 LSF). For 2020, this specific systemic buffer reach it fully loaded level of 1%.

The countercyclical buffer plays a role in determining the overall buffer requirement. The countercyclical buffer rate is set by country. Each establishment calculates its countercyclical buffer requirement by measuring the average countercyclical buffer rate for each country, adjusted to take into account the relevant credit risk exposures in these countries. The countercyclical buffer rate, in force as of 1st January 2016, generally lies between 0% and 2.5% by country. The countercyclical buffer requirement for SG Luxembourg Group on 31/12/2020 represents an add-on of 0.05%.

Following the Supervisory Review and Evaluation Process (SREP) notification, SG Luxembourg has been informed by official letter by the CSSF that the bank must hold 1% of P2R entirely in the form of CET1.

In reaction to the coronavirus pandemic, on 12 March 2020, the ECB allowed banks to partially use capital instruments that do not qualify as Common Equity Tier 1 (CET1) capital to meet the P2Rs. As of the date of the application of this decision, SG Luxembourg Group were thus allowed to meet their P2R as follows:

- 0.5625% in the form of CET1 capital
- 0.75% in the form of Tier 1 capital
- 1% in the form of Total capital

3.4 CAPITAL REQUIREMENTS

The Basel 3 Accord established the new rules for calculating minimum capital requirements in order to more accurately assess the risks to which banks are exposed. The calculation of credit risk-weighted assets takes into account the transaction risk profile based on two approaches for determining risk-weighted assets: (i) a standard method, and (ii) advanced methods based on internal models for rating counterparties.

TABLE 3: OVERVIEW OF RWAS (OV1)

	(in EUR 1000)	**RWAs Q4 2020**	**RWAs Q4 2019**	**Minimum capital requirements Q4 2020**
1	Credit risk (excluding CCR)	8 375 862	8 484 168	670 069
2	*Of which the standardised approach*	*541 277*	*766 232*	*43 302*
4	*Of which the advanced IRB (AIRB) approach*	*7 744 887*	*7 636 726*	*619 591*
5	*Of which equity IRB under the simple risk-weighted approach or the IMA*	*89 698*	*81 211*	*7 176*
6	CCR	267 507	324 678	21 401
7	*Of which mark to market*	*261 869*	*317 643*	*20 950*
12	*Of which CVA*	*5 638*	*7 035*	*451*
13	Settlement risk	781	1 159	62
14	Securitization exposures in the banking book (after the cap)	2 159 573	2 159 573	172 766
18	*Of which standardised approach*	*2 159 573*	*2 159 573*	*172 766*
19	Market risk	31 012	34 363	2 481
20	*Of which the standardised approach*	*31 012*	*34 363*	*2 481*
22	Large exposures	–	–	–
23	Operational risk	1 285 905	1 644 801	102 872
24	*Of which basic indicator approach*	*82 469*	*93 079*	*6 597*
26	*Of which advanced measurement approach*	*1 203 436*	*1 551 721*	*96 275*
27	Amounts below the thresholds for deduction (subject to 250% risk weight)	175 589	128 014	14 047
29	**Total**	**12 296 228**	**12 776 755**	**983 698**

3.5 CAPITAL MANAGEMENT

As part of managing its capital, SG Luxembourg Group (under the supervision of the Finance Division) ensures that its solvency level is always compatible with the following objectives:

- meeting its regulatory requirement;
- maintaining its financial solidity and respecting the Risk Appetite targets;
- preserving its financial flexibility to finance organic growth, within SG Group risk weighted assets allocation;
- maintaining the bank's resilience in the event of stress scenarios.

SG Luxembourg Group determines its internal capital risk appetite thresholds and limits in accordance with these objectives and regulatory requirements. It has an internal process for assessing the adequacy of its capital that measures the adequacy of the Group's capital ratios in light of regulatory constraints.

As of 31st December 2020, the SG Luxembourg Group's Common Equity Tier 1 ratio and the total capital ratio were at 22.25% (please refer to chapter 3.8 for more details).

3.6 LEVERAGE RATIO MANAGEMENT

SG Luxembourg Group calculates its leverage ratio according to the CRR leverage ratio rules, as amended by the Delegated Act of 10th October 2014 and manages it according to the changes brought by CRR2 applicable from June 2021.

Managing the leverage ratio means both calibrating the amount of Tier 1 capital (the ratio's numerator) and controlling the Group's leverage exposure (the ratio's denominator) to achieve the target ratio levels that the Group sets for itself.

SG Luxembourg Group aims to maintain a consolidated leverage ratio higher than the 3.0% minimum in the Basel Committee's recommendations.

As of 31st December 2020, the SG Luxembourg Group's leverage ratio were at 5.39%.

TABLE 4: SUMMARY RECONCILIATION OF ACCOUNTING ASSETS AND LEVERAGE RATIO EXPOSURES (LRSUM)

(in EUR 1000)

1	Total assets	55 516 865
5	Adjustment for securities financing transactions (SFTs)	1 694 336
6	Adjustment for off-balance sheet items	2 610 450
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	(9 057 000)
7	Other adjustments	(19 330)
8	**Leverage ratio total exposure measure**	**50 745 322**

TABLE 5: LEVERAGE RATIO COMMON DISCLOSURE (LRCOM)

(in EUR 1000)

Part 1: On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	54 975 175
2	Asset amounts deducted in determining Tier 1 capital	(19 330)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	54 955 845
Part 2: Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	541 690
11	Total derivatives exposures	541 690
Part 3: SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	1 694 336
16	Total securities financing transaction exposures	1 694 336
Part 4: Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	3 263 322
18	Adjustments for conversion to credit equivalent amounts	(652 872)
19	Other off-balance sheet exposures	2 610 450
Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off-balance sheet)		
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	(9 057 000)
Part 5: Capital and total exposure measure		
20	Tier 1 capital	2 736 366
21	Leverage ratio total exposure measure	50 745 322
Part 6: Leverage ratio		
22	Leverage ratio	5.39%
EU-22a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank exposures)	4.58%
Part 7: Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased in
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	–

TABLE 6: SPLIT-UP OF ON BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS AND EXEMPTED EXPOSURES) (LRSPL)

(in EUR 1000)

EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	45 918 175
EU-2	Trading book exposures	67 807
EU-3	Banking book exposures, of which:	45 850 367
EU-5	Exposures treated as sovereigns	4 370 678
EU-7	Institutions	20 232 622
EU-8	Secured by mortgages of immovable properties	1 026 483
EU-9	Retail exposures	1 966 573
EU-10	Corporate	15 740 852
EU-12	Other exposures (eg equity, securitizations, and other non-credit obligation assets)	2 513 159

3.7 RATIO OF LARGE EXPOSURES

The CRR (European Capital Requirements Regulation) incorporates the provisions regulating large exposures. As such, the SG Luxembourg Group must not have any exposure where the total amount of net risks incurred on a single beneficiary exceeds 25% of the Group's capital. The eligible capital used to calculate the large exposure ratio is the total regulatory capital.

The final rules of the Basel Committee on large exposures will be transposed in Europe via CRR2. The main change compared with the current CRR is the calculation of the regulatory limit (25%), henceforth expressed as a proportion of Tier 1 (instead of total capital), as well as the introduction of a cross-specific limit on systemic institutions (15%).

On 31 December 2020 SG Luxembourg Group had no additional RWA requirements due to the large exposures framework.

3.8 APPENDIX: INFORMATION ON REGULATORY OWN FUNDS

TABLE 7: CAPITAL INSTRUMENTS' MAIN FEATURES TEMPLATE

Capital instruments main features template		**Tier one instrument**
1	Issuer	Societe Generale Luxembourg
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Not applicable
3	Governing law(s) of the instrument	French law
	Regulatory treatment	
4	Transitional CRR rules	CET1
5	Post-transitional CRR rules	CET1
6	Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Ordinary share
8	Amount recognised in regulatory capital (in EUR million)	1389
9	Nominal amount of instrument	EUR 126
9a	Issue price	NA
9b	Redemption price	NA
10	Accounting classification	Capital
11	Original date of issuance	NA
12	Perpetual or dated	Perpetual
13	Original maturity date	No maturity
14	Issuer call subject to prior supervisory approval	NA
15	Optional call date, contingent call dates and redemption amount	NA
16	Subsequent call dates, if applicable	NA
	Coupons I dividends	
17	Fixed or floating dividend/coupon	Floating
18	Coupon rate and any related index	NA
19	Existence of a dividend stopper	NA
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Full discretion
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Full discretion
21	Existence of step up or other incentive to redeem	NA
22	Noncumulative or cumulative	NA
23	Convertible or non-convertible	NA
24	If convertible, conversion trigger(s)	NA
25	If convertible, fully or partially	NA
26	If convertible, conversion rate	NA
27	If convertible, mandatory or optional conversion	NA
28	If convertible, specify instrument type convertible into	NA
29	If convertible, specify issuer of instrument it converts into	NA
30	Write-down features	NA
31	If write-down, write-down trigger(s)	NA
32	If write-down, full or partial	NA
33	If write-down, permanent or temporary	NA
34	If temporary write-down, description of write-up mechanism	NA
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	NA
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	NA

TABLE 8: OWN FUNDS DISCLOSURE TEMPLATE

(in EUR 1000)

Common Equity Tier 1 capital: instruments and reserves		**31/12/2020**
1	Capital instruments and the related share premium accounts	1 391 860
2	Retained earnings	1 355 622
3	Accumulated other comprehensive income	52 158
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**2 799 640**
Common Equity Tier 1 (CET1) capital: regulatory adjustments		
8	Intangible assets (net of related tax liability) (negative amount)	(34 154)
11	Fair value reserves related to gains or losses on cash flow hedges	14 824
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment (negative amount)	(8 016)
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	(35 929)
28	**Total regulatory adjustments to Common equity Tier 1 (CET1)**	**(63 274)**
29	**Common Equity Tier 1 (CET1) capital**	**2 736 366**
Additional Tier 1 (AT1) capital: instruments		
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	–
Additional Tier 1 (AT1) capital: regulatory adjustments		
41	Excess of deduction from T2 items over T2 Capital (deducted in AT1)	35 929
42	Qualifying T2 deductions that exceed the T2 capital of the institution	(35 929)
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**–**
44	**Additional Tier 1 (AT1) capital**	**–**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**2 736 366**
Tier 2 (T2) capital: Instruments and provisions		
50	Credit risk adjustments	1 821
51	**Tier 2 (T2) capital before regulatory adjustments**	**1 821**
Tier 2 (T2) capital: regulatory adjustments		
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	(37 750)
56	Excess of deduction from T2 items over T2 Capital (deducted in AT1)	35 292
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(1 821)**
58	**Tier 2 (T2) capital**	**–**
59	**Total capital (TC = T1 + T2)**	**2 736 366**
60	**Total risk weighted assets**	**12 296 228**

Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	22.3%
62	Tier 1 (as a percentage of total risk exposure amount)	22.3%
63	Total capital (as a percentage of total risk exposure amount)	22.3%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer expressed as a percentage of risk exposure amount)	8.1%
65	of which: capital conservation buffer requirement	2.5%
66	of which: countercyclical buffer requirement	0.1%
67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	1%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	18.8%
Amounts below the thresholds for deduction (before risk weighting)		
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	52 130
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	70 236
Applicable caps on the lncluslon of provisions In Tier 2		
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	7 019
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	47 667

TABLE 9: AMOUNT OF INSTITUTION-SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER

Amount of institution-specific countercyclical capital buffer (Reg (EU) 2015/1555))		*(in EUR 1000)*
010	Total risk exposure	12 296 228
020	Institution specific countercyclical buffer rate	0.052%
030	Institution specific countercyclical buffer requirement	6 394

TABLE 10: GEOGRAPHICAL DISTRIBUTION OF CREDIT EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL CAPITAL BUFFER

		General credit exposures		Trading book exposure		Securitization exposure
SG Luxembourg 31 December 2020 (in EUR 1000)		Exposure value for SA	Exposure value for IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value of securitization positions in the banking book
		010	020	030	040	055
010	Breakdown by country					
	United Arab Emirates	–	782 439	–	–	–
	Argentina	3 690	7 927	–	–	–
	Austria	–	70	–	–	–
	Australia	–	1	–	–	–
	Azerbaijan	–	798	–	–	–
	Belgium	–	323 379	–	–	–
	Bulgaria	–	3 994	–	–	–
	Bahrain	–	9 730	–	–	–
	Bermuda	–	27 140	–	–	–
	Brazil	–	51 516	–	–	–

Own funds requirements: Of which: General credit exposures	Own funds requirements: Of which: Trading book exposures	Own funds requirements: Of which: Securitization exposures	Own funds requirements: Total	Own funds requirement weights	Countercyclical capital buffer rate	Institution-specific countercyclical own funds requirements * countercyclical rate
070	080	090	100	110	140	
16 256	–	–	16 256	–	–	–
332	–	–	332	–	–	–
1	–	–	1	–	–	–
–	–	–	–	–	–	–
3	–	–	3	–	–	–
5 118	–	–	5 118	–	–	–
20	–	–	20	–	–	–
118	–	–	118	–	–	–
422	–	–	422	–	–	–
1 545	–	–	1 545	–	–	–

SG Luxembourg 31 December 2020 (in EUR 1000)	General credit exposures: Exposure value for SA	General credit exposures: Exposure value for IRB	Trading book exposure: Sum of long and short position of trading book	Trading book exposure: Value of trading book exposure for internal models	Securitization exposure: Exposure value of securitization positions in the banking book
	010	**020**	**030**	**040**	**055**
Canada	–	760	–	–	–
Switzerland	27 353	1 219 518	–	–	–
Côte d'Ivoire	–	265	–	–	–
Chile	–	1 352	–	–	–
China	12 677	162 163	–	–	–
Colombia	–	1	–	–	–
Cyprus	–	11 448	–	–	–
Czech Republic	–	7 531	–	–	–
Germany	1 122 975	154 795	–	–	–
Denmark	–	3 326	–	–	–
Egypt	–	33 726	–	–	–
Spain	35 000	372 418	–	–	–
Finland	–	10 192	–	–	–
France	4 135 368	1 527 393	7 566	–	–
United Kingdom	837 196	419 226	–	–	–
Guernsey	–	146 433	–	–	–
Ghana	–	3	–	–	–
Gibraltar	–	–	–	–	–
Greece	–	1 889	–	–	–
Hong Kong	–	8 012	–	–	–
Hungary	–	13 684	–	–	–
Ireland	488 147	284 188	–	–	–
Israel	–	35 265	–	–	–
Italy	245 190	137 309	–	–	–
India	–	–	–	–	–
Jersey	–	13 525	–	–	–
Jordan	–	34 511	–	–	–
Japan	–	283	–	–	–
Korea, Republic of	–	81 768	–	–	–
Kuwait	–	19 695	–	–	–
Cayman Islands	–	71 464	–	–	–
Kazakhstan	–	26 507	–	–	–
Lebanon	–	32 837	–	–	–
Liechtenstein	–	21 752	–	–	–
Luxembourg	552 471	3 501 106	–	–	–
Morocco	–	12 160	–	–	–
Monaco	–	3 011 410	–	–	–
Madagascar	–	983	–	–	–
Marshall Islands	–	–	–	–	–
Mauritania	–	269	–	–	–
Malta	–	8 220	–	–	–
Mauritius	–	5 129	–	–	–
Mexico	1 485	20 906	–	–	–
New Caledonia	–	–	–	–	–

Own funds requirements						
Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitization exposures	Total	Own funds requirement weights	Countercyclical capital buffer rate	Institution-specific countercyclical own funds requirements * countercyclical rate
070	080	090	100	110	140	
3	–	–	3	–	–	–
52 740	–	–	52 740	–	–	–
4	–	–	4	–	–	–
5	–	–	5	–	–	–
4 184	–	–	4 184	–	–	–
–	–	–	–	–	–	–
55	–	–	55	–	–	–
39	–	–	39	–	–	–
2 583	–	–	2 583	–	–	–
17	–	–	17	–	–	–
480	–	–	480	–	–	–
22 636	–	–	22 636	–	–	–
99	–	–	99	–	–	–
232 410	605	–	233 015	–	–	–
7 502	–	–	7 502	–	–	–
751	–	–	751	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
26	–	–	26	–	–	–
111	–	–	111	–	–	1
470	–	–	470	–	–	–
4 684	–	–	4 684	–	–	–
139	–	–	139	–	–	–
5 938	–	–	5 938	–	–	–
–	–	–	–	–	–	–
195	–	–	195	–	–	–
158	–	–	158	–	–	–
7	–	–	7	–	–	–
2 091	–	–	2 091	–	–	–
190	–	–	190	–	–	–
2 304	–	–	2 304	–	–	–
487	–	–	487	–	–	–
194	–	–	194	–	–	–
112	–	–	112	–	–	–
141 351	–	–	141 351	–	–	353
65	–	–	65	–	–	–
88 983	–	–	88 983	–	–	–
4	–	–	4	–	–	–
–	–	–	–	–	–	–
1	–	–	1	–	–	–
35	–	–	35	–	–	–
73	–	–	73	–	–	–
540	–	–	540	–	–	–
–	–	–	–	–	–	–

SG Luxembourg 31 December 2020 (in EUR 1000)	General credit exposures		Trading book exposure		Securitization exposure
	Exposure value for SA	**Exposure value for IRB**	**Sum of long and short position of trading book**	**Value of trading book exposure for internal models**	**Exposure value of securitization positions in the banking book**
	010	**020**	**030**	**040**	**055**
Netherlands	127 902	418 584	–	–	–
Norway	–	58	–	–	–
New Zealand	–	–	–	–	–
Oman	–	1 940	–	–	–
Panama	–	4 085	–	–	–
Peru	–	–	–	–	–
French Polynesia	–	189	–	–	–
Poland	–	33	–	–	–
Portugal	–	21 028	–	–	–
Qatar	–	45 063	–	–	–
Isle of Man	–	54	–	–	–
Pakistan	–	407	–	–	–
Andorra	–	–	–	–	–
Curaçao	–	–	–	–	–
Cuba	–	73	–	–	–
Anguilla	–	1	–	–	–
Romania	–	2	–	–	–
Serbia	–	638	–	–	–
Russian Federation	–	481 330	–	–	–
Saudi Arabia	–	43 751	–	–	–
Seychelles	–	986	–	–	–
Sweden	–	49 333	–	–	–
Singapore	31 248	2 806	–	–	–
Slovakia	–	622	–	–	–
Thailand	–	504	–	–	–
Turkey	–	2 004	–	–	–
Ukraine	–	2 581	–	–	–
United States	399 888	1 517 923	1 035	–	–
Virgin Islands, British	–	295 986	–	–	–
South Africa	–	1 179	–	–	–
020 **Total**	**8 020 591**	**15 511 578**	**8 601**	**–**	**–**

Own funds requirements						
Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitization exposures	Total	Own funds requirement weights	Countercyclical capital buffer rate	Institution-specific countercyclical own funds requirements * countercyclical rate
070	080	090	100	110	140	
11 422	–	–	11 422	–	–	–
1	–	–	1	–	–	–
–	–	–	–	–	–	–
8	–	–	8	–	–	–
151	–	–	151	–	–	–
–	–	–	–	–	–	–
1	–	–	1	–	–	–
5	–	–	5	–	–	–
296	–	–	296	–	–	–
242	–	–	242	–	–	–
–	–	–	–	–	–	–
2	–	–	2	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
2	–	–	2	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
3	–	–	3	–		
15 320	–	–	15 320	–	–	–
498	–	–	498	–		
5	–	–	5	–	–	–
2 347	–	–	2 347	–	–	–
563	–	–	563		–	–
3	–	–	3	–	–	–
12	–	–	12	–	–	–
22	–	–	22	–	–	–
22	–	–	22		–	–
52 056	83	–	52 139	–	–	–
4 529	–	–	4 529	–	–	–
28	–	–	28	–	–	–
683 023	**688**	**–**	**683 711**	**–**	**–**	**356**

4. CREDIT RISKS

Credit and counterparty risk (including concentration effects) means the risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. Credit risk includes the counterparty risk linked to market transactions and securitization activities. In addition, credit risk may be further amplified by individual, country and sector concentration risk. It is extended to supplier risks and takes into account techniques for limiting the effects of concentration. It also incorporates settlement/delivery risk.

4.1 CREDIT RISK MANAGEMENT: ORGANIZATION AND STRUCTURE

For each business line, the risk tolerance is consistent with the decisions and orientations taken by SG Luxembourg Board of Directors and also the strategy, guidelines and practices defined by the SG Group. This risk tolerance is monitored by the Risk Division which has defined a control and monitoring system, in conjunction with the business divisions and based on the credit risk policy.

The Risk Division is responsible for:

- setting global and individual credit limits by client, client category or transaction type;
- authorizing transactions submitted by the sales departments;
- approving ratings or internal client rating criteria;
- monitoring exposures (daily, monthly, large exposures and various specific credit portfolios;
- approving specific and general provisioning policies.

In addition, a specific department performs comprehensive portfolio analyses, provides the associated reports, including those for the supervisory authorities and assumes the Risk Project steering.

The amount of exposure for each client group is assessed relative to the amount of SG Luxembourg Group's own capital under the Large Exposure approach. In addition, the SG Luxembourg Group has defined an individual concentration management policy for corporate clients. This policy relies on an internal reference table for evaluating the level of individual concentration, taking into account a consistent measure of exposure (senior unsecured equivalent exposure) and based on the duration of the commitments and the counterparty's rating. The governance rules for tracking and validating individual concentration and the approval level of threshold breaches have been validated by the Risk Committee and the Board of Directors. All of the client groups that have a high exposure level are regularly presented in the Risk Committee. This governance requires that every new transaction with a concentration greater than a specific threshold must be approved by SG Luxembourg CEO.

4.2 CREDIT POLICY

SG Luxembourg Group's credit policy is based on the principle that approval of any credit risk undertaking must be based on sound knowledge of the client and the client's business, an understanding of the purpose and structure of the transaction, and of the sources of repayment of the debt. Credit decisions must also ensure that the structure of the transaction will minimise the risk of loss in the event that the counterparty defaults. Furthermore, the credit approval process takes into consideration the overall commitment of the group to which the client belongs. Risk approval forms part of the SG Luxembourg Group's risk management strategy in line with its risk appetite.

The risk approval process is based on four core principles:

- all transactions involving credit risk (debtor risk, settlement/delivery risk, issuer risk and replacement risk) must be pre-authorised;
- responsibility for analysing and approving transactions lies with the dedicated primary customer relation unit and risk unit, which examine all authorisation requests relating to a specific client or client group, to ensure a consistent approach to risk management;
- the primary customer relation unit and the risk unit must be independent from each other;
- credit decisions must be systematically based on internal risk ratings (obligor rating), as provided by the primary customer relation unit and approved by the Risk Division. The Risk Division submits recommendations on the limits which it deems appropriate for certain countries, geographic regions, sectors, products or customer types, in order to reduce risks with strong correlations. These limits form part of the Risk Appetite Exercise and are subject to approval of the Board of Directors.

4.3 RISK SUPERVISION AND MONITORING SYSTEM

Private bank activities

As mentioned above; the business line has a specific credit policy that is regularly updated and adapted to each of its entities, which specifies the practical terms for implementation.

The risk associated with Private Banking clients is primarily managed through the quality of the debtor and its credit worthiness with a case by case analysis of the transaction.

The minimisation of risk of loss and the optimisation of the profitability/capital ratio allocated to the risks is a major goal. Loan approval is primarily offered to clients who hold assets with SG Luxembourg Group, or prospects that have a real development potential for its target business. In principle, any credit exposure granted must receive a guarantee (pledge/surety/collateral), preferably drawing on financial assets and meeting criteria such that the potential risk of loss is minimal. Private banking aims for a net cost of risk goal no greater than 10 bps of exposures. The credit approach is based on the bank's operational capacity to track changes in each loan's collateral.

Loan to value is determined by applying discounts to the value of the collateralized assets based on its quality, liquidity, volatility, and diversification of assets. SG Luxembourg Group implements a monitoring mechanism for detecting degradation in collateral and if it arises defining, with its clients, measures for resolving any margin shortfall. The loan applications are also reviewed in order to assess the debtor's quality and make a decision about the transaction (background and economic justification for the financing).

The SG Luxembourg Group also offers centralized cash management services to Private banking clients which generate interbank exposures and exposures to financial institutions with respect to the conversions performed and the hedging transactions. The risk policy in the matter relies on privileged recourse to the entities of the Group for treasury activities, with limitation to the minimum of the external interbank loans (overnight and term loans); increased reinvestment with respect to central banks; close management of depositor risk in the corresponding banks (nostri accounts); and prioritised use of clearing for interbank foreign-exchange activity.

Corporate loans

The business line's credit approach is based on a case-by-case approval of the proposed arrangements and structures, from regulatory, prudential, tax, risk and accounting perspectives. As mentioned above, the credit approach is in line with a comprehensive banking relationship which disallows the approval of credit in the absence of a business relationship with SG Group. Beyond the unit credit limits for each client, counterparty, or group of clients and counterparties, SG Luxembourg Group sets limits and thresholds in terms of concentration. It pays particular attention to the concentration of its credit risks while ensuring, along several axes, that its exposures are well diversified. These thresholds are set and reviewed annually and are steered through the quarterly Risk Committee. In the event these limits and thresholds are breached, an action plan is established. The limits and thresholds are approved by the Board.

SG Luxembourg Group regularly measures industry concentrations. Sensitive industries are identified by risk rating; by a net exposure after deducting guarantees, insurance and cash collateral above €400 million; or by a decision of the Risk Committee. Industries identified as posing a concentration risk are covered by special guidance through an industry-based limit approved in the Risk Committee. The calibration of the thresholds primarily relies on measuring risk in stress tests, particularly by measuring the estimated loss to the SG Luxembourg Group equity in a stress scenario.

Monitoring of Country Risk

Country risk arises when an exposure (loan, security, guarantee or derivative) becomes liable to negative impact from changing regulatory, political, economic, social and financial conditions in the country of exposure. It includes exposure to any kind of counterparty, including a sovereign state (sovereign risk is also controlled by the system of counterparty risk limits). Overall limits and strengthened monitoring of exposures have been established for countries based on their internal ratings and governance indicators. Supervision is not limited to emerging markets. Country limits are approved annually by Authorised Management and the Board of Directors.

They can be revised downward at any time if the country's situation deteriorates or is expected to deteriorate. All of SG Luxembourg Group's exposures (securities, derivatives, loans and guarantees) are taken into account by this monitoring. The country risk methodology determines an initial country of risk and a final country of risk (after the effects of any guarantees) within the country limits framework.

Credit stress tests

With the aim of identifying, monitoring and managing credit risk, the Risk Division had implemented a stress test plan, as promoted in Circular CSSF 11/506 updated by Circular CSSF 20/573, in order to assess to what extent unfavourable elements may challenge the match between the business model (activity stress), the risk profile and the existing capacity to manage and support the risk. This exercise leads, if required, to the development and implementation of corrective action plans to guarantee the longevity of the institution.

Like global stress tests, specific stress tests draw on a core scenario and a stressed scenario, which are defined by the SG Group's sector experts and economists. The core scenario draws on an in-depth analysis of the situation surrounding the activity or the country concerned. The stressed scenario describes triggering events and assumptions regarding the development of a crisis, both in quantitative terms (changes in a country's GDP, the unemployment rate, deterioration in a sector) and qualitative terms.

Structured around the portfolio analysis function, the Risk Division teams translate these economic scenarios into impacts on risk parameters (default exposure, default rate, provisioning rate at entry into default, etc.). To this end, the leading methods are based in particular on the historical relationship between economic conditions and risk parameters. As with the global stress tests, in connection with the regulatory pillar, stress tests routinely take into account the possible effect of counterparty performance for counterparties in which the SG Luxembourg Group is most highly concentrated in a stressed environment.

Impairment

Impairments include impairments on groups of homogeneous assets, which cover performing loans, and specific impairments, which cover counterparties in default.

Impairments on groups of homogeneous assets are collective impairments booked for portfolios that are homogeneous and have a deteriorated risk profile although no objective evidence of default can be observed at an individual level.

These homogeneous groups include sensitive counterparties, sectors or countries. They are identified through regular analyses of the portfolio by sector, country or counterparty type.

These impairments are calculated on the basis of assumptions on default rates and loss rates after default. These assumptions are calibrated by homogeneous group based on their specific characteristics, sensitivity to the economic environment and historical data. They are reviewed periodically by the Risk Division of SG Group.

Decisions to book specific impairments on certain counterparties are taken where there is objective evidence of default. The amount of impairment depends on the probability of recovering the amounts due. The expected cash flows are based on the financial position of the counterparty, its economic prospects and the guarantees called up or that may be called up.

A counterparty is deemed to be in default when at least one of the following conditions is verified:

- a significant decline in the counterparty's financial position leads to a high probability of it being unable to fulfil its overall commitments (credit obligations), thereby generating a risk of loss to the bank whether or not the debt is restructured; and/or
- regardless of the type of loan (property or other), one or more receivables past due at least 90 days have been recorded (with the exception of loans restructured on probation, which are considered to be in default at the first missed payment, in accordance with the technical standard published in 2013 by the EBA relative to restructured loans); and/or
- a recovery procedure is under way; and/or
- the debt was restructured less than one year previously; and/or
- legal proceedings such as a bankruptcy, legal settlement or compulsory liquidation are in progress.

The SG Luxembourg Group applies the default contagion principle to all of counterparty's outstanding exposures. When a debtor belongs to a group, all of the group's outstanding exposures are generally defaulted as well.

4.4 IFRS9 ORGANIZATION

IFRS 9 Debt instruments provisioning: general concepts

An impairment or loss allowance will be recognized for expected credit losses on debt instruments classified in financial assets at amortised cost or at fair value through equity, for lease receivables and for loan commitments and financial guarantees given. These impairments and allowances are recognised as soon as the loan is granted or as soon as the bonds are acquired, without waiting for the occurrence of an objective evidence of impairment.

The objective is to provide a gradual and phased approach to the recognition of loss allowances for credit risk symmetrically to the recognition in profit/(loss) of the credit margin included in the interest income.

The financial assets concerned will be allocated to three categories according to the gradual increase in their credit risk since initial recognition. Impairment will be booked to each of these categories as follows:

CREDIT RISK IDENTIFIED FROM INITIAL RECOGNITION ON THE FINANCIAL ASSET

RISK CATEGORIES	**STAGE 1** PERFORMING LOANS	**STAGE 2** SIGNIFICANT INCREASE IN CREDIT RISK	**STAGE 3** DOUBTFUL DEBT/ CREDIT IMPAIRED
TRANSFER CRITERIA	Initial classification in Stage 1 > *Maintained as long as there is no significant increase in credit risk*	There is a significant increase in credit risk since initial recognition on the balance sheet/more than 30 days past due	Default identified/ more than 90 days past due
CREDIT RISK MEASUREMENT	12-months expected credit losses	Lifetime expected credit losses	Lifetime expected credit losses
BASIS OF CALCULATION OF INTEREST INCOME	Gross carrying amount of the financial asset before allowance for impairment	Gross carrying amount of the financial asset before allowance for impairment	Net carrying amount of the financial asset after allowance for impairment

A significant increase in credit risk will be assessed on an instrument-by-instrument basis, but may also be assessed on the basis of homogenous portfolios of similar assets, where individual assessment is not relevant. A counterparty-based approach (applying the default contagion principle to all of the counterparty's outstanding loans) will also be possible if it gives similar results. The Group must take into account all available information as well as the potential consequences of a change in macro-economic factors so that any significant increase in the credit risk on a financial asset can be assessed as early as possible. There will be a rebuttable presumption that the credit risk on a financial asset has increased significantly when the contractual payments on this asset are more than 30 days past due. However, this 30-day late period is an ultimate indicator. The entity should use all available information (behaviour scores, “loan to value” type indicators, etc.) and apply a forward looking approach to assess whether there is a significant increase in credit risk before contractual payments are over 30 days past due. Application of IFRS 9 will not alter the definition of default currently used by the Group to determine whether or not there is objective evidence of impairment of a financial asset. An asset will notably be presumed in default if one or more contractual payments are more than 90 days past due. Impairment of groups of similar assets will be replaced by impairment calculated according to the 12-month or lifetime expected credit losses:

- A portion of the exposures on counterparties whose financial position has deteriorated since initial recognition of the financial assets, but where no individual objective indication of impairment has been identified (increase in credit risk) will be included in Stage 2 and impairment will be calculated in the amount of the lifetime ECL;
- Exposures on counterparties in economic sectors considered to be in crisis following the occurrence of loss events, or exposures on regions or countries in which an increase in credit risk has been assessed will be classified either in Stage 1 (impairment calculated in an amount equal to the 12-month ECL) or Stage 2 (impairment calculated in an amount equal to the lifetime ECL), depending on their individual credit risk and factoring in the deterioration in the sector or country from inception to the balance sheet date.

12-month expected credit losses will be measured taking into account past events, the current situation, as well as reasonable forward-looking information. Therefore, these expected losses will not be calculated according to average data observed through the cycle.

The calculation of lifetime expected credit losses will take into account historical data, the current situation, and reasonable forward-looking information on possible changes in general economic conditions, as well as relevant macroeconomic factors until contract maturity.

An impairment or loss allowance must be recognized for expected credit losses on debt instruments classified in financial assets at amortised cost or at fair value through equity, for lease receivables and for loan commitments and financial guarantees given, according to IFRS 9 standards.

The expected credit loss must be at least equal to the 12-month expected credit loss and must be adjusted to give the lifetime expected credit loss for the remaining term of the financial instrument, if there is a significant increase in credit risk since initial recognition.

Therefore the main change is the recognition of impairment on sound loans, from inception or from acquisition of the bonds.

IFRS 9 implementation principles

Since 1 January 2018, the Group has been recording provisions on performing loans under the IFRS9 accounting standard. This assessment is based on statistical models for assessing probabilities of default and potential losses in the event of default, which take into account a prospective analysis based on macroeconomic scenarios. The Group's cost of risk could be negatively impacted by a proven or anticipated deterioration in the quality of the outstanding loan portfolios or macroeconomic prospects. In addition, IFRS 9 accounting standard principles and provisioning models could be pro-cyclical in the event of a sharp and sudden deterioration in the environment or result in enhanced volatility in the event of fluctuations in the economic prospects. This could lead to a significant and/or not fully anticipated change in the cost of risk and therefore in the Group's results.

The methodology for calculating Stage 1 and 2 expected credit losses is based on the Basel framework, which served as the basis for selecting the methods for valuing the parameters for calculating IFRS 9 provisions (probability of default and loss given default for exposures under the A-IRB approaches, and the provisioning rate for exposures under the standardised method). The segmentation of portfolios is realized at the level of SG Luxembourg to ensure that they are consistent in terms of risk characteristics and to ensure better correlation with global and local macroeconomic variables. This new segmentation is consistent or equivalent to one defined in the Basel framework in order to ensure the uniqueness of past data on defaults and losses.

The forward-looking ECL approach (12-month/lifetime ECL) is based first and foremost on the incorporation of economic forecasts in probability of default. The main macroeconomic variable used for SG Luxembourg Group is the economic growth of each European country.

The ECL is calculated using assumptions on default rates and losses on default. It takes into account macro-economic forecasts specific to the business sector or country. The assumptions are calibrated by homogenous groups of assets based on each group's specific characteristics, its sensitivity to the economic environment and historical data. The assumptions are reviewed periodically by the Risk Division of SG Luxembourg Group.

On private banking perimeter, a simplified approach of expected credit losses calculation is deployed.

Under the simplified method, given the unavailability or lack of depth of historical data and the small size of portfolios at SG Group level, for Stage 1 exposures the ECL is estimated on the basis of a flat-provisioning rate per homogeneous risk group (pools).

This rate, reviewed quarterly by SG Group Risk department in charge with the business line, is determined based on statistical approach using PD x LGD estimated based on historical default and recovery rates per portfolio.

For Stage 2 exposures, SG Luxembourg applies an individual approach, based on an expert analysis for each counterparty or transaction. However, a floor, which corresponds to S1 provisioning rate must be applied to Private Banking Stage 2 expected credit losses.

4.4.1 Covid-19 crisis impact on methodology

Covid-19 crisis impact on IFRS 9

In this context of high incertitude due unprecedented health and economic crisis, SG Group has developed during the second quarter 2020 four new macro-economic scenarios to better reflect the impacts and uncertainties generated by the Covid-19 crisis. These scenarios have been updated at the end of 2020 for the preparation of the consolidated financial statements.

SG Luxembourg Group policy relies on SG Group's modelizations for macroeconomic scenarios and analysis of activities. The simplified approach for Private Banking activities has been also adapted to take into account an additional forward-looking consideration.

On 31 December 2020, SG Group maintained the coexistence of four scenarios owing to a still high level of uncertainty, and adjusted them to reflect the perspectives at that date:

- the central scenario (SG Central) expects, after a significant fall in GDP in the countries where the Group has been operating in 2020, a gradual rebound from 2021, considering that the travel restrictions measures will be lifted by the beginning of 2022;
- a scenario of prolonged health crisis (SG Extended) expects that the travel restrictions measures will be lifted by the beginning of 2023;
- lastly, two scenarios, one favourable and one stress supplement these two scenarios.

Calculation of expected credit losses

The main evolutions of the year concerned are as follows:

- the expected credit losses model update to take into account the impact of the new macroeconomic scenarios described above;
- adjustments performed on case by case basis to better reflect the impact on SG Luxembourg Group expected credit losses;
- the sector adjustments update and adjustments on the scope of Private Banking entities that use the simplified approach;
- the classification in default on few Private Banking and Corporate clients.

SECTOR ADJUSTMENTS

The different models used to estimate the expected credit losses are supplemented by sector adjustments that increase or decrease the amount of expected credit losses. These adjustments allow to better anticipations defaults or recoveries in certain cyclical sectors. During 2020, these adjustments have been reviewed and supplemented to take into account the specific risk on sectors particularly affected by the Covid-19 crisis.

Moreover, since the last quarter of 2020, some sectors are considered as having significantly deteriorated due to the crisis.

For those sectors, SG Group management has validated the full transfer to stage 2 of all exposures from those sectors in Non Retail, except the exposures granted after April 1st 2020 as SG Group has considered that after that date and even though the pandemic situation may have evolved, its potential impact was known. As such, it cannot be considered that all contracts in one sector have significantly deteriorated since origination. For these contracts granted after April 2020, the usual criteria apply.

The table below summarized the sectors impacted:

C – Automotive
D1 – Shipbuilding, Railway and Aeronautical contruction
F – Oil and Gas
I22 – Non Food Retail
J11 – Airlines
J12 – Shipping/ Cruise
N1 – Hotel / Restaurant/ Leisure

ADJUSTMENTS ON THE OUTSTANDING LOANS UNDER THE SIMPLIFIED APPROACH

For the Private Banking portfolio, adjustments have also been performed during 2020 to reflect the deterioration of credit risk on some portfolios, in case of the correlations between the macroeconomic variables and the probability of default could not be established for the developed models.

Compared to an usual situation, where stage 1 probability of default are made up of the averages over the last 4 quarters of the default rates observed at one year, for second quarter of 2020, an additional “Forward Looking” overlay has been defined.

This additional coefficient has been maintained until the end of the year.

4.5 REPLACEMENT RISK

Replacement risk, i.e. counterparty risk associated with market transactions, is a type of credit risk (potential loss in the event that the counterparty defaults). It represents the current cost to the SG Luxembourg Group of replacing transactions with a positive market value should the counterparty default. Transactions giving rise to a replacement risk are, inter alia, security repurchase agreements, securities lending and borrowing, purchase/sale transactions or foreign exchange transactions in Delivery Versus Payment (DVP) and derivative contracts such as swaps, options and futures traded over the counter or with central counterparty clearing houses (CCP).

Management of counterparty risk linked to market transactions

SG Luxembourg Group places great emphasis on carefully monitoring its credit and counterparty risk exposure in order to minimise its losses in case of default. Counterparty limits are assigned to all counterparties on the supervision of SG Group Risk Division.

The credit profile of counterparties is reviewed on a regular basis and limits are set both according to the type and maturity of the instruments concerned. The intrinsic creditworthiness of counterparties and the reliability of the associated legal documentation are two factors considered when setting these limits. Information technology systems allow both traders and the Risk Division to ensure that counterparty limits are not exceeded. Any significant weakening in the bank’s counterparties also prompts urgent internal rating reviews. A specific supervision and approval process is put in place for more sensitive counterparties or more complex financial instruments.

Setting individual counterparty limits

In order to quantify the potential risk, SG Luxembourg Group uses the internal model and associated metrics of the SG Group which estimates a loss distribution. Two metrics from the loss distribution are used to monitor the risk:

- current average risk, particularly suitable for analysing the risk exposure for a portfolio of customers;
- Credit VaR (or CVaR): the largest loss that would be incurred after eliminating the top 1% of the most adverse occurrences, used to set the risk limits for individual counterparties.

Wrong-way risk

Wrong-way risk is the risk that occurs when the exposure-at-default to a counterparty increases when the probability that the counterparty defaults also increases.

Within SG Luxembourg Group this risk can occur mainly in its private banking activities where clients could provide collateral whose value is correlated with their own probability of default. SG Luxembourg Group limits this risk by having a limit on the percentage of collateral requirements met with collateral presenting wrong-way risk. This ensures that most of the collateral value provided is not correlated with the probability of default.

4.6 HEDGING OF CREDIT RISK

Guarantees and collateral

SG Luxembourg Group uses credit risk mitigation techniques both for market, commercial and private banking activities. These techniques provide partial or full protection against the risk of debtor insolvency.

There are two main categories:

- A commitment made by a third party to replace the primary debtor in the event of the latter's default. These guarantees encompass the protection commitments and mechanisms provided by banks and similar credit institutions, specialised institutions (insurers, export credit agencies or credit insurers mainly).
- Collateral can consist of physical assets in the form of property, as well as financial instruments such as cash, high-quality investments and securities, and also insurance policies. It could also include precious metal. Appropriate haircuts are applied to the value of collateral, reflecting its quality and liquidity. The SG Luxembourg Group proactively manages its risks by diversifying guarantees.

During the credit approval process, an assessment is performed on the value of guarantees and collateral, their legal enforceability and the guarantor's ability to meet its obligations. This process also ensures that the collateral or guarantee successfully meets the criteria set forth in the Capital Requirements Directive (CRD).

Guarantor ratings are reviewed internally at least once a year and collateral is subject to revaluation at least once a year. The Risk function is responsible for approving the operating procedures established by the business divisions for the regular valuation of guarantees and collateral, either automatically or based on an expert opinion, whether during the approval phase for a new loan or upon the annual renewal of the credit application.

Mitigation of counterparty risk linked to market transactions

SG Luxembourg Group uses a number of techniques to manage its credit risk. With regard to counterparties dealing with market transactions, it seeks to implement master agreements with a termination clearing clause wherever it can. In the event of default, these allow netting of all due and payable amounts. These contracts usually call for the revaluation of the required collateral at regular intervals (often on a daily basis) and for the payment of the corresponding margin calls. Collateral is largely composed of cash and high-quality liquid assets, such as government bonds with a high rating. Other tradable assets are also accepted, provided that the appropriate haircuts are made to reflect the lower quality and/or liquidity of the asset.

4.7 RISK MEASUREMENT AND INTERNAL RATINGS

SG Luxembourg Group uses the internal models developed by SG Group since 2007. SG Luxembourg Group obtained the authorisation from SG Group supervisory authorities to apply the Advanced Internal Ratings-Based (AIRB) approach to most of its exposures in order to calculate the capital requirements in respect of credit risk.

Since the initial authorisation was given, the transition from the standard approach to the AIRB approach for some of its activities and exposures has been selective and marginal.

Exposures treated under the Standardised approach for Credit Risk are limited and mainly correspond to SGCMF and SGFD (subsidiaries of SG Luxembourg).

Credit risk measurement for wholesale clients

SG Luxembourg Group uses the SG Group rating system for Wholesale clients, for example for exposures to Sovereign, Financial Institutions and Specialised Lending. The SG Group's credit risk measurement system, which estimates internal Basel parameters, uses a quantitative evaluation mechanism coupled with an expert opinion.

For Corporate, Banking and Sovereign portfolios, the measurement system is based on three key components:

- a counterparty rating system;
- a system that automatically assigns Loss Given Default (LGD) and Credit Conversion Factor (CCF) parameters according to the characteristics of each transaction;
- a collection of procedures setting out the rules relating to ratings (scope, revision frequency, rating approval procedure, etc.), as well as to the supervision, backtesting and validation of models. Among other things, these procedures help to support the human judgement that provides the critical scrutiny that is an essential complement to the models for these portfolios.

RATING SYSTEM

The rating system consists in assigning a rating to each counterparty according to an internal scale, for which each grade corresponds to a probability of default determined using historical series observed by Standard & Poor's over more than 20 years.

The following table presents SG's internal rating scale and the corresponding scales of the main external credit assessment institutions, as well as the corresponding mean probability of default.

The rating assigned to a counterparty is generally proposed by a model and then adjusted and approved by experts in the Risk function further to the individual analysis of each counterparty.

The counterparty rating models are structured in particular according to the type of counterparty (companies, financial institutions, public entities, etc.), the country, geographic region and size of the company (usually assessed through its annual revenue).

The Company rating models are underpinned by statistical models (regression methods) of client default. They combine quantitative parameters derived from financial data that evaluate the sustainability and solvency of counterparties and qualitative parameters that evaluate economic and strategic dimensions.

LGD MODELS

The Loss Given Default (LGD) is an economic loss that is measured by taking into account all parameters pertaining to the transaction, as well as the fees incurred for recovering the receivable in the event of a counterparty default.

The models used to estimate the Loss Given Default (LGD) excluding retail clients are applied by regulatory sub-portfolios, type of asset, size and location of the transaction or of the counterparty, depending on whether or not collateral has been posted, and the nature thereof if applicable. This makes it possible to define homogenous risk pools, particularly in terms of recovery, procedures and the legal environment.

These estimates are founded on statistics when the number of loans in default is sufficient. In such circumstances, they are based on recovery data observed over a long period. When the number of defaults is insufficient, the estimate is revised or determined by an expert.

CCF MODELS (CREDIT CONVERSION FACTOR)

For its off-balance sheet exposures, the SG Luxembourg Group is authorized to use the internal approach for "term loan with drawing period" products and revolving credit lines.

BACKTESTS

The performance level of the entire wholesale client credit system is measured by regular back tests that compare PD, LGD and CCF estimates with actual results by portfolio.

The compliance of this system is based on the consistency between the parameters used and the long-term trends analysed, with safety margins that take into account areas of uncertainty (cyclicality, volatility, quality of data, etc.).

The safety margins applied are regularly estimated, checked and revised if necessary. The results of back tests can justify the implementation of remedial plans if the system is deemed to be insufficiently prudent.

Credit risk measurements of retail clients

SG Luxembourg Group uses retail client credit models for its Private banking activities.

PROBABILITY OF DEFAULT MODELS

The modelling of the probability of default of retail client counterparties is carried out specifically by each of the SG Group's business lines recording its assets using the IRBA method. The models incorporate data on the payment behaviour of counterparties.

Once the counterparties have been classified into statistically distinct homogenous risk pools, the probability of default parameters are estimated by observing the average long-term default rates for each product. These estimates are adjusted by a safety margin to estimate as best as possible a complete default cycle, using a through-the-cycle (TTC) approach.

LGD MODELS

The models for estimating the Loss Given Default (LGD) of retail customers are specifically applied by business line portfolio. LGD values are estimated by product, according to the existence or not of collateral.

Consistent with operational recovery processes, estimate methods are generally based on a two-step modelling process that initially estimates the proportion of defaulted loans in loan termination, followed by the loss incurred in case of loan termination.

The expected losses are estimated using internal long-term historical recovery data for exposures that have defaulted. These estimates are adjusted by safety margins in order to reflect the possible impact of a downturn.

CCF MODELS (CREDIT CONVERSION FACTOR)

For its off-balance sheet exposures, SG Luxembourg Group applies its estimates for revolving loans and overdrafts on current accounts held by retail customers.

BACKTESTS

The performance level of the entire retail client credit system is measured by regular back tests, which check the performance of PD, LGD and CCF models and compare estimated figures with actual figures.

Each year, the average long-term default rate observed for each homogenous risk pool is compared with the PD. If necessary, the calibrations of PD are adjusted to preserve a satisfactory safety margin. The discrimination level of the models and changes in the portfolio's composition are also measured.

Regarding the LGD, the back test consists in comparing the last estimation of the LGD obtained by computing the average level of payments observed and the value used to calculate regulatory capital.

The difference should in this case reflect a sufficient safety margin to take into account a potential economic slowdown, uncertainties as to the estimation, and changes in the performance of recovery processes.

Likewise, for the CCF, the level of conservatism of estimates is assessed annually by comparing estimated drawdowns to observed drawdowns on the undrawn part.

TABLE 11: INTERNAL RATING SCALE [2] AND CORRESPONDING SCALES OF RATING AGENCIES

Counterparty internal rating	DBRS	Fitch Ratings	Moody's	S&P	1 year PD
1	AAA	AAA	Aaa	AAA	0.01%
2	AA high to HH low	AA+ to AA-	Aa1 to Aa3	AA+ to AA-	0.02%
3	A high to A low	A+ to A-	A1 to A3	A+ to A-	0.04%
4	BBB high to BBB low	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	0.30%
5	BB high to BB low	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	2.16%
6	B high to B low	B+ to B-	B1 to B3	B+ to B-	7.93%
7	CCC high to CCC low	CCC+ to CCC-	Caa1 to Caa3	CCC+ to CCC-	20.67%
8, 9 and 10	CC and below	CC and below	Ca and below	CC and below	100.00%

4.8 QUANTITATIVE INFORMATION

TABLE 12: IRB (SPECIALISED LENDING AND EQUITIES) (EU CR10)

(in EUR 1000)	On- balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Capital requirements
Exchange-traded equity exposures	11 621	–	290%	11 621	33 700	2 696
Other equity exposures	15 135	–	370%	15 135	55 998	4 480
Total	**26 755**	**–**	**–**	**26 755**	**89 698**	**7 176**

SG Luxembourg Group does not have any specialized lending exposures treated under the slotting approach.

2 The internal rating scales used by SG Luxembourg Group correspond to the scales used by SG Group.

4.9 ADDITIONAL QUANTITATIVE INFORMATION ON GLOBAL CREDIT RISK (CREDIT AND COUNTERPARTY RISK)

TABLE 13: TOTAL AND AVERAGE NET AMOUNT OF EXPOSURES (CRB-B)

		a	b
(in EUR 1000)		Net value of exposures at the end of the period	Average net exposures over the period
1	Central governments or central banks	12 826 801	13 151 891
2	Institutions	9 724 142	44 046 115
3	Corporates	22 272 781	22 524 908
4	*Of which: Specialised lending*	*2 678 707*	*2 228 736*
5	*Of which: SMEs*	*4 867 287*	*5 008 019*
6	Retail	3 205 708	3 420 550
7	*Secured by real estate property*	*1 035 604*	*1 044 397*
8	*Of which: SMEs*	–	–
9	*Of which: Non-SMEs*	*1 035 604*	*1 044 397*
11	*Other retail*	*2 170 104*	*2 376 153*
12	*Of which: SMEs*	–	–
13	*Of which: Non-SMEs*	*2 170 104*	*2 376 153*
14	Equity	68 815	23 053
16	***Total IRB approach***	***48 098 247***	***83 224 742***
17	Central governments or central banks	40 167	16 063
18	Regional governments or local authorities		
22	Institutions	2 718 257	6 101 125
23	Corporates	7 939 194	7 529 711
24	*Of which: SMEs*	***10 862***	***3 095 394***
25	Retail	–	–
27	Secured by mortgages on immovable property	–	–
28	*Of which: SMEs*	–	–
29	Exposures in default	–	–
35	Other exposures	319 881	416 613
36	***Total standardised approach***	**11 017 500**	**14 063 512**
37	**Total**	**59 115 747**	**97 288 254**

TABLE 14: GEOGRAPHICAL BREAKDOWN OF EXPOSURES (CRB-C)

	(Net exposure in EUR 1000)	**Total Western Europe and European Union members**	**France**	**Luxembourg**	**Monaco**
1	Central governments or central banks	12 826 801	1 438 343	9 233 141	–
2	Institutions	9 482 210	8 981 360	103 921	–
3	Corporates	17 941 260	1 542 181	11 224 410	1 927 778
4	Retail	2 730 229	114 638	792 011	946 034
5	Equity	68 815	68 815		
7	***Total IRB approach***	***43 049 314***	***12 145 339***	***21 353 483***	***2 873 811***
8	Central governments or central banks	40 167	–	40 167	
9	Institutions	2 718 257	2 182 072	68 404	–
10	Corporates	7 446 289	4 092 816	433 477	–
11	Exposures in default				
13	Other exposures	319 881	–	319 881	–
14	***Total standardised approach***	**10 524 594**	**6 274 888**	**861 929**	**–**
15	**Total**	**53 573 908**	**18 420 227**	**22 215 413**	**2 873 811**

Switzerland	Other Western Europe and European Union members	Africa & Midle East	Eastern Europe excluding EU members	Latin America & Caribbean	North America & Asia Pacific	Total
817 454	1 337 862	–	–	–	–	**12 826 801**
77 235	319 693	34 199	1 104	100 259	106 371	**9 724 142**
750 624	2 496 267	1 054 971	734 818	512 939	2 028 793	**22 272 781**
674 144	203 402	424 814	26 270	11 687	12 709	**3 205 708**
						68 815
2 319 457	***4 357 224***	***1 513 985***	***762 192***	***624 884***	***2 147 872***	***48 098 247***
	–	–	–	–	–	**40 167**
–	467 781	–	–	–	–	**2 718 257**
25 279	2 894 717	–	–	5 175	487 731	**7 939 194**
–	–	–	–	–	–	**319 881**
25 279	**3 362 498**	**–**	**–**	**5 175**	**487 731**	**11 017 500**
2 344 736	**7 719 722**	**1 513 985**	**762 192**	**630 059**	**2 635 603**	**59 115 747**

TABLE 15: CONCENTRATION OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPES (CRB-D)

	(in EUR 1000)	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply
1	Central governments or central banks	–	–	–	–
2	Institutions	–	–	–	–
3	Corporates	457 662	614 505	20 039	13 063
4	Retail	–	–	–	–
6	Equity	–	–	–	–
7	***Total IRB approach***	***457 662***	***614 505***	***20 039***	***13 063***
8	Central governments or central banks	–	–	–	–
9	Institutions	–	–	–	–
10	Corporates	–	40 350	–	–
12	Other exposures	–	–	–	–
13	***Total standardised approach***	**–**	**40 350**	**–**	**–**
14	**Total**	**457 662**	**654 855**	**20 039**	**13 063**

	(in EUR 1000)	Financial activities	Real estate activities
1	Central governments or central banks	10 067 086	–
2	Institutions	9 531 972	–
3	Corporates	3 460 701	188 120
4	Retail	–	–
6	Equity	42 060	–
7	***Total IRB approach***	***23 101 819***	***188 120***
8	Central governments or central banks	–	–
9	Institutions	2 649 853	–
10	Corporates	5 591 290	–
11	Other exposures	–	–
12	***Total standardised approach***	**8 241 143**	**–**
13	**Total**	**31 342 963**	**188 120**

Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication		Total
–	–	–	–	–		**12 826 801**
–	–	–	–	–		**9 724 142**
170 781	34 012	544 357	192 253	26 585		**22 272 781**
–	–	–	–	–		**3 205 708**
–	–	–	–	–		**68 815**
170 781	***34 012***	***544 357***	***192 253***	***26 585***	**See next table for the other categories**	***48 098 247***
–	–	–	–	–		**40 167**
–	–	–	–	–		**2 718 257**
159 600	720 653	–	–	40 998		**7 939 194**
–	–	–	–	–		**319 881**
159 600	**720 653**	**–**	**–**	**40 998**		**11 017 500**
330 381	**754 665**	**544 357**	**192 253**	**67 583**		**59 115 747**

Professional, scientific and technical activities	Administrative and support service activities	Public administration and defence, compulsory social security	Human health services and social work activities	Arts, entertainment and recreation	Other services	Total
–	–	2 711 776	–	12 033	–	**12 826 801**
–	–	–	–	–	–	**9 724 142**
406 765	8 771 633	–	–	–	4 700	**22 272 781**
–	–	–	–	–	–	**3 205 708**
–	–	–	–	–	–	**68 815**
406 765	***8 771 633***	***2 711 776***	***–***	***12 033***	***4 700***	***48 098 247***
–	–	–	–	–	40 167	**40 167**
–	–	–	–	–	68 404	**2 718 257**
811 477	–	–	–	–	574 825	**7 939 194**
–	–	–	–	–	319 881	**319 881**
811 477	**–**	**–**	**–**	**–**	**1 003 278**	**11 017 500**
1 218 242	**8 771 633**	**2 711 776**	**12 033**	**4 700**	**11 831 425**	**59 115 747**

TABLE 16: MATURITY OF EXPOSURES (CRB-E)

		a	b
		Net exposure value	
(in EUR 1000)		On demand	<= 1 year
1	Central governments or central banks	1 749 652	7 809 461
2	Institutions	97 391	3 334 693
3	Corporates	84 470	8 197 765
4	Retail	–	2 907 754
6	***Total IRB approach***	**1 931 512**	**22 249 673**
7	Central governments or central banks	–	40 167
12	Institutions	–	1 483 256
13	Corporates	–	7 079 562
22	Other exposures	–	315 259
23	***Total standardised approach***	**–**	**8 918 244**
24	**Total**	**1 931 512**	**31 167 916**

On-balance-sheet items are only reported according to requirements from EBA/GL/2016/11.

c	d	e	f
> 1 year <= 5 years	> 5 years	No stated maturity	**Total**
1 571 364	878 870	817 454	**12 826 801**
3 093 360	2 446 453	259 102	**9 230 999**
9 257 730	2 400 769	12 069	**19 952 803**
74 732	–	–	**2 982 486**
13 997 186	**5 726 092**	**1 088 624**	**44 993 087**
–	–	–	**40 167**
785 911	–	6 321	**2 275 488**
–	–	–	**7 079 562**
–	–	–	**315 259**
785 911	**–**	**6 321**	**9 710 476**
14 783 097	**5 726 092**	**1 094 946**	**54 703 563**

TABLE 17: CREDIT QUALITY OF EXPOSURES BY EXPOSURE CLASS AND INSTRUMENT (CR1-A)

		a	b	c
		Gross carrying values of		
	(in EUR 1000)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment
1	Central governments or central banks	–	12 826 802	1
2	Institutions	–	9 724 720	578
3	Corporates	404 411	21 933 687	65 317
4	*Of which: Specialised lending*	*32 038*	*2 654 783*	*8 114*
5	*Of which: SMEs*	*160 926*	*4 728 783*	*22 423*
6	Retail	*134 224*	*3 082 332*	*10 848*
7	*Secured by real estate property*	*87 454*	*952 199*	*4 049*
9	*SMEs*	–	–	–
10	*Non-SMEs*	*87 454*	*952 199*	*4 049*
11	*Other retail*	*39 109*	*2 137 794*	*6 798*
12	*Non-SMEs*	*39 109*	*2 137 794*	*6 798*
13	*Equity*	–	*68 815*	–
15	***Total IRB approach***	**538 634**	**47 636 357**	**76 744**
16	Central governments or central banks	–	40 167	–
17	Institutions	–	2 718 294	37
18	Corporates	–	7 939 196	1
19	*Of which: SMEs*	–	***10 863***	***1***
20	Other exposures	–	319 881	–
21	***Total standardised approach***	**–**	**11 017 537**	**38**
22	**Total**	**538 634**	**58 653 895**	**76 782**
23	*Of which: Loans*	*533 856*	*40 594 002*	*72 857*
24	*Of which: Debt securities*	–	*13 544 958*	–
25	*Of which: Off- balance-sheet exposures*	*4 778*	*4 514 935*	*3 925*

d	e	f	g
General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
–	–	1	12 826 801
–	–	578	9 724 142
–	–	65 317	22 272 781
–	–	*8 114*	*2 678 707*
–	–	*22 423*	*4 867 287*
–	–	*10 848*	*3 205 708*
–	–	*4 049*	*1 035 604*
–	–	–	–
–	–	*4 049*	*1 035 604*
–	–	*6 798*	*2 170 104*
–	–	*6 798*	*2 170 104*
–	–	–	*68 815*
–	**–**	**76 744**	**48 098 247**
–	–	–	40 167
–	–	37	2 718 257
–	–	1	7 939 194
–	**–**	***1***	***10 862***
–	–	–	319 881
–	**–**	**38**	**11 017 500**
–	**–**	**76 782**	**59 115 747**
–	–	*72 857*	*41 055 001*
–	–	–	*13 544 958*
–	–	*3 925*	*4 515 788*

TABLE 18: CREDIT QUALITY OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPES (CR1-B)

		a	b	c
		Gross carrying values of		
(in EUR 1000)		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment
2	Mining and quarrying	–	458 627	965
3	Manufacturing	–	655 485	629
4	Electricity, gas, steam and air conditioning supply	–	20 049	10
5	Water supply	–	13 356	293
6	Construction	–	330 569	189
7	Wholesale and retail trade	–	754 704	39
8	Transport and storage	32 038	518 434	6 115
9	Accommodation and food service activities	218 427	–	26 174
10	Information and communication	–	67 586	3
11	Financial activities	–	31 344 918	1 955
12	Real estate activities	1	188 207	88
13	Professional, scientific and technical activities	–	1 220 038	1 796
14	Administrative and support service activities	–	8 772 911	1 278
15	Public administration and defence, compulsory social security	–	2 711 776	–
17	Human health services and social work activities	–	12 034	1
18	Arts, entertainment and recreation	–	5 008	308
19	Other services	288 169	11 580 193	36 937
20	**Total**	**538 634**	**58 653 895**	**76 782**

d	e	f	g
General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
–	–	–	**457 662**
–	–	–	**654 855**
–	–	–	**20 039**
–	–	–	**13 063**
–	–	–	**330 381**
–	–	–	**754 665**
–	–	–	**544 357**
–	–	–	**192 253**
–	–	–	**67 583**
–	–	–	**31 342 963**
–	–	–	**188 120**
–	–	–	**1 218 242**
–	–	–	**8 771 633**
–	–	–	**2 711 776**
–	–	–	**12 033**
–	–	–	**4 700**
–	–	–	**11 831 425**
–	**–**	**–**	**59 115 747**

TABLE 19: CREDIT QUALITY OF EXPOSURES BY GEOGRAPHY (CR1-C)

	a	b	c
	Gross carrying values of		
(in EUR 1000)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment
Western europe	506 553	53 140 029	72 674
France	*3 671*	*18 375 846*	*1 350*
Luxembourg	*362 364*	*21 891 158*	*38 109*
Monaco	*71 712*	*2 816 313*	*14 214*
Switzerland	*65 542*	*2 289 277*	*10 084*
Western Europe and European Union members	*3 264*	*7 725 375*	*8 917*
Africa & Midle East	3	1 515 096	1 114
Eastern Europe excluding EU members	0	763 007	815
Latin America & Caribbean areas	32 078	599 837	1 856
North America & Asia Pacific	0	2 635 926	323
Total	**538 634**	**58 653 895**	**76 782**

TABLE 20: CREDIT QUALITY OF FORBORNE EXPOSURES

		a	b	c	d
		Gross carrying amount/nominal amount of exposures with forbearance measures			
		Performing forborne	**Non-performing forborne**		
	(in EUR 1000)			Of which defaulted	Of which impaired
1	Loans and advances	127 421	12 604	12 604	12 604
2	*Central banks*	–	–	–	–
3	*General governments*	–	–	–	–
4	*Credit institutions*	–	–	–	–
5	*Other financial corporations*	*7 747*	*1 099*	*1 099*	*1 099*
6	*Non-financial corporations*	*108 285*	*4 757*	*4 757*	*4 757*
7	*Households*	*11 389*	*6 749*	*6 749*	*6 749*
8	Debt Securities	–	–	–	–
9	Loan commitments given	–	–	–	–
10	**Total**	**127 421**	**12 604**	**12 604**	**12 604**

d	e	f	g
			Net values
General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	(a+ b -c-d)[22]
–	–	72 674	53 573 908
–	–	*1 350*	*18 378 167*
–	–	*38 109*	*22 215 413*
–	–	*14 214*	*2 873 811*
–	–	*10 084*	*2 344 736*
–	–	*8 917*	*7 719 722*
–	–	1 114	1 513 985
–	–	815	762 192
–	–	1 856	630 059
–	–	323	2 635 603
–	**–**	**76 782**	**59 115 747**

e	f	g	h
Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		**Collateral received and financial guarantees received on forborne exposures**	
On performing forborne exposures	**On non-performing forborne exposures**		**Of which collateral and financial guarantees received on non-performing exposures with forbearance measures**
(298)	(850)	133 844	11 755
–	–	–	–
–	–	–	–
–	–	–	–
(13)	*(219)*	*8 037*	*880*
(253)	*(300)*	*108 032*	*4 457*
(32)	*(331)*	*17 775*	*6 418*
–	–	–	–
–	–	–	–
(298)	**(850)**	**133 844**	**11 755**

TABLE 21: CREDIT QUALITY OF PERFORMING AND NON-PERFORMING EXPOSURES BY PAST DUE DAYS

	a	b	c	d	e
	Gross carrying amount/nominal amount				
	Performing exposures				
(in EUR 1000)		Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days
Loans and advances	**32 979 548**	**32 950 241**	**29 307**	**533 856**	**298 140**
Central banks	–	–	–	–	–
General governments	*12 034*	*12 034*	–	–	–
Credit institutions	*10 123 362*	*10 123 362*	–	–	–
Other financial corporations	*2 676 226*	*2 676 226*	–	*20 629*	*19 653*
Non-financial corporations	*17 308 434*	*17 300 380*	*8 054*	*383 782*	*268 789*
Of which SMEs	*3 531 574*	*3 523 520*	*8 054*	*133 117*	*18 201*
Households	*2 859 492*	*2 838 240*	*21 253*	*129 446*	*9 698*
Debt securities	**10 339 927**	**10 339 927**	**–**	**–**	**–**
Central banks	–	–	–	–	–
General governments	*2 947 663*	*2 947 663*	–	–	–
Credit institutions	*387 969*	*387 969*	–	–	–
Other financial corporations	*7 004 295*	*7 004 295*	–	–	–
Non-financial corporations	–	–	–	–	–
Off-balance-sheet exposures	**4 891 298**	**–**	**–**	**4 778**	**–**
Central banks	–	–	–	–	–
General governments	–	–	–	–	–
Credit institutions	*1 235 526*	–	–	–	–
Other financial corporations	*1 467 253*	–	–	–	–
Non-financial corporations	*1 961 005*	–	–	–	–
Households	*227 514*	–	–	*4 778*	–
Total	**48 210 773**	**43 290 168**	**29 307**	**538 634**	**298 140**

f	g	h	i	j	k	l
Gross carrying amount/nominal amount						
Non-performing forborne						
Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
67 154	**36 257**	**75 984**	**38 081**	**15 468**	**2 772**	**533 856**
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	*914*	*61*	–	–	*20 629*
45 106	*15 398*	*23 047*	*14 629*	*14 041*	*2 772*	*383 782*
45 042	*15 397*	*23 047*	*14 629*	*14 028*	*2 772*	*133 117*
22 048	*20 860*	*52 023*	*23 391*	*1 426*	–	*129 446*
–	**–**	**–**	**–**	**–**	**–**	**–**
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	**–**	**–**	**–**	**–**	**–**	**4 778**
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	*4 778*
67 154	**36 257**	**75 984**	**38 081**	**15 468**	**2 772**	**538 634**

TABLE 22: PERFORMING AND NON-PERFORMING EXPOSURES AND RELATED PROVISIONS

	a	b	c	d	e	f
	Gross carrying amount/nominal amount					
	Performing exposures			**Non-performing exposures**		
(in EUR 1000)		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3
Loans and advances	**32 979 548**	**31 891 042**	**757 943**	**533 856**	**–**	**533 856**
Central banks	–	–	–	–	–	–
General governments	12 034	12 034	–	–	–	–
Credit institutions	10 123 362	10 123 362	–	–	–	–
Other financial corporations	2 676 226	2 284 325	61 337	20 629	–	20 629
Non-financial corporations	17 308 434	16 634 593	673 841	383 782	–	383 782
Of which SMEs	3 531 574	3 458 503	73 071	133 117	–	133 117
Households	2 859 492	2 836 727	22 765	129 446	–	129 446
Debt securities	**10 339 927**	**10 291 924**	**–**	**–**	**–**	**–**
Central banks	–	–	–	–	–	–
General governments	2 947 663	2 947 663	–	–	–	–
Credit institutions	387 969	339 966	–	–	–	–
Other financial corporations	7 004 295	7 004 295	–	–	–	–
Non-financial corporations	–	–	–	–	–	–
Off-balance-sheet exposures	**4 891 298**	**4 562 418**	**328 879**	**4 778**	**–**	**4 778**
Central banks	–	–	–	–	–	–
General governments	–	–	–	–	–	–
Credit institutions	1 235 526	1 235 526	–	–	–	–
Other financial corporations	1 467 253	1 330 284	136 969	–	–	–
Non-financial corporations	1 961 005	1 769 094	191 911	–	–	–
Households	227 514	227 514	–	4 778	–	4 778
Total	**48 210 773**	**46 745 384**	**1 086 822**	**538 634**	**–**	**538 634**

g	h	i	j	k	l	m	n	o
Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						**Accumulated partial write-off**	**Collateral and financial guarantees received**	
Performing exposures – accumulated impairment and provisions			**Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**				On performing exposures	On non-performing exposures
	Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3			
(25 913)	**(17 231)**	**(8 682)**	**(59 842)**	**–**	**(59 842)**	**–**	**20 871 266**	**268 187**
–	–	–	–	–	–	–	–	–
(1)	(1)	–	–	–	–	–	–	–
(673)	(673)	–	–	–	–	–	1 803 893	–
(1 652)	(1 439)	(213)	(280)	–	(280)	–	1 662 204	7 913
(19 283)	(11 070)	(8 213)	(48 851)	–	(48 851)	–	14 620 827	142 014
(6 103)	(6 030)	(73)	(21 147)	–	(21 147)	–	3 395 604	111 443
(4 303)	(4 046)	(256)	(10 711)	–	(10 711)	–	2 784 342	118 260
–	**–**	**–**	**–**	**–**	**–**	**–**	**5 448**	**–**
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	5 448 497	–
–	–	–	–	–	–	–	–	–
4 022	**1 175**	**2 846**	**–**	**–**	**–**	**–**	**1 403 985**	**–**
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
67	67	–	–	–	–	–	290 805	–
231	213	18	–	–	–	–	388 708	–
3 685	856	2 829	–	–	–	–	509 124	–
39	39	–	–	–	–	–	215 349	–
(21 891)	**(16 056)**	**(5 836)**	**(59 842)**	**–**	**(59 842)**	**–**	**22 280 700**	**268 187**

4.10 CREDIT RISK DETAIL

TABLE 23: CHANGES IN THE STOCK OF GENERAL AND SPECIFIC CREDIT RISK ADJUSTMENTS (EU CR2-A)

(in EUR 1000)	**Accumulated specific credit risk adjustment with IFRS9 impact**
Opening balance	**(13 092)**
Decreases due to amounts reversed for estimated loan losses during the period	1 360
Decreases due to amounts taken against accumulated credit risk adjustments	74
Transfers between credit risk adjustments	(48 067)
Other adjustments	(117)
Closing balance	**(59 842)**

TABLE 24: CHANGES IN THE STOCK OF DEFAULTED AND IMPAIRED LOANS AND DEBT SECURITIES (EU CR2-B)

(in EUR 1000)	**Gross carrying value defaulted exposures**
Opening balance	**156 234**
Loans and debt securities that have defaulted or impaired since the last reporting period	416 880
Returned to non-defaulted status	(39 183)
Amounts written off	(74)
Other changes	–
Closing balance	**533 856**

TABLE 25: CRM TECHNIQUES – OVERVIEW (EU CR3)

		a	**b**	**c**	**d**
	(in EUR 1000)	**Exposures unsecured – Carrying amount**	**Exposures secured – Carrying amount**	**Exposures secured by collateral**	**Exposures secured by financial guarantees**
1	Total loans	11 893 960	21 619 445	11 948 861	9 670 584
2	Total debt securities	4 353 456	5 986 471	5 448 497	537 974
3	***Total exposures***	**16 247 415**	**27 605 916**	**17 397 358**	**10 208 558**
4	Of which defaulted	265 669	268 187	268 187	–

For the definitions of “Total loans” and “Total debt securities”, see table CR1-D.

TABLE 26: STANDARDISED APPROACH – CREDIT RISK EXPOSURE AND CRM EFFECTS (EU CR4)

		a	b	c	d	e	f
(in EUR 1000)		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
Exposure classes		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1	Central governments or central banks	40 167	–	40 167	–	–	0%
2	Institutions	2 275 488	442 769	2 275 488	221 385	59 222	2%
3	Corporates	7 079 562	859 633	7 079 562	430 457	164 485	2%
4	Other items	315 259	4 622	315 259	2 311	317 570	100%
5	**Total**	**9 710 476**	**1 307 024**	**9 710 476**	**654 152**	**541 277**	**5%**

TABLE 27: STANDARDISED APPROACH (EU CR5)

(in EUR 1000)		Risk weight				
Exposure classes		0%	20%	50%	100%	**Total**
1	Central governments or central banks	40 167	–	–	–	**40 167**
2	Institutions	2 200 763	296 110	–	–	**2 496 873**
3	Corporates	7 006 029	421 770	26	82 192	**7 510 018**
5	Other items	–	–	–	317 570	**317 570**
6	**Total**	**9 246 960**	**717 880**	**26**	**668 703**	**10 364 628**

SG Luxembourg does not rely on external ratings for the computation of RWAs therefore it did not disclose the “of which unrated” within this table as this information is not relevant. The exposures in table 19 include Counterparty Credit Risk exposures treated under the standardised approach.

TABLE 28: CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (EU CR6)

		a	b	c	d
(in EUR 1000)	PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF
Central governments or central banks	0.00 to <0.15	12 826 802	–	–	13 384 622
	2.50 to <10.00	–	–	–	2 889
	Subtotal	**12 826 802**	**–**	–	**13 387 511**
Institutions	0.00 to <0.15	8 804 464	416 494	0.29	17 820 173
	0.25 to <0.50	31 926	–	–	31 926
	0.50 to <0.75	1 556	–	–	1 556
	0.75 to <2.50	293 371	76 667	0.75	181 274
	2.50 to <10.00	100 242	–	–	100 242
	Subtotal	**9 231 560**	**493 161**	**0.36**	**18 135 171**
Corporates	0.00 to <0.15	9 713 712	426 588	0.47	1 841 457
	0.15 to <0.25	1 321 706	333 319	1.00	1 642 174
	0.25 to <0.50	2 421 513	820 510	0.70	3 018 415
	0.50 to <0.75	1 988 349	229 021	0.67	1 488 405
	0.75 to <2.50	3 744 478	410 825	0.61	3 391 683
	10.00 to <100.00	371 007	90 000	0.52	278 881
	100.00 (Default)	46 664	9 013	0.52	48 099
	Subtotal	**20 014 344**	**2 323 754**	**0.64**	**12 120 507**
Retail	0.15 to <0.25	1 038 051	199 230	1.00	1 227 730
	0.25 to <0.50	670 242	1 220	1.00	671 461
	0.50 to <0.75	217 138	8 716	1.00	225 458
	0.75 to <2.50	941 891	13 505	1.00	955 046
	100.00 (Default)	125 917	646	1.00	126 397
	Subtotal	**2 993 239**	**223 317**	**1.00**	**3 206 091**
Total (all portfolios)		**45 065 944**	**5 905 891**	**0.59**	**46 849 279**

e	f	g	h	i	j	k	l
Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
–	27	0.00	1.6	22 617	0.17%	1	1
0.08	2	0.45	1.6	5 048	1.75%	–	–
–	**29**	**0.00**	**1.6**	**27 665**	**0.21%**	**1**	**1**
–	57	0.20	2.4	1 771 122	9.94%	640	532
–	6	0.34	1.0	9 145	28.64%	28	3
0.01	4	0.49	0.0	962	61.83%	4	–
0.01	6	0.05	1.4	17 840	9.84%	102	36
0.03	4	0.55	1.0	16 258	–	163	7
–	**77**	**0.20**	**2.4**	**1 815 327**	**10.01%**	**937**	**578**
–	102	0.21	3.3	255 214	13.86%	816	1 101
–	–	0.12	3.4	153 380	9.34%	378	245
–	38	0.27	2.8	863 986	28.62%	5 714	1 492
0.01	31	0.41	3.6	763 160	51.27%	2 047	1 031
0.01	60	0.27	4.0	2 082 187	61.39%	10 314	7 252
0.04	452	0.29	2.4	193 407	–	2 466	2 816
0.15	14	0.34	2.4	32 022	66.58%	1 041	2 557
0.04	**700**	**0.28**	**3.3**	**4 944 943**	**40.80%**	**72 362**	**65 317**
–	–	0.12	4.2	60 615	4.94%	282	113
–	–	0.14	0.2	44 860	6.68%	222	22
0.01	–	0.29	0.8	51 048	22.64%	344	56
0.01	1	0.20	1.3	288 460	30.20%	2 297	221
1.00	–	0.27	4.7	469 910	371.77%	11 168	10 435
0.06	**1**	**0.18**	**2.6**	**914 892**	**28.54%**	**14 313**	**10 848**
0.01	**807**	**0.16**	**2.4**	**7 702 827**	**16.44%**	**87 614**	**76 744**

TABLE 29: RWA FLOW STATEMENTS OF CREDIT RISK EXPOSURES UNDER THE IRB APPROACH (EU CR8)

		a	b
	(in EUR 1000)	**RWA amounts**	**Capital requirements**
1	**RWAs as at the end of the previous reporting period**	**7 592 983**	**607 439**
2	Asset size	236 030	–
3	Asset quality	(70 898)	–
4	Model updates	160 733	–
5	Methodology and policy	–	–
6	Acquisitions and disposals	(92 976)	–
7	Foreign exchange movements	(123 045)	–
8	Other	–	–
9	**RWAs as at the end of the reporting period**	**7 702 827**	**616 226**

4.11 COUNTERPARTY CREDIT RISK DETAIL

TABLE 30: ANALYSIS OF CCR EXPOSURE BY APPROACH (EU CCR1)

		a	b	c	d	e	f	g
	(in EUR 1000)	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		1 809 088	199 472			2 008 560	241 632
2	Original exposure	–					–	–
3	Standardised approach		–			–	–	–
4	IMM (for derivatives and SFTs)				–	–	–	–
5	*Of which securities financing transactions*				–	–	*1 694 336*	*197 848*
6	*Of which derivatives and long settlement transactions*				–	–	*230 920*	*36 702*
7	*Of which from contractual cross-product netting*				–	–	*83 304*	*7 082*
8	Financial collateral simple method (for SFTs)						–	–
9	Financial collateral comprehensive method (for SFTs)						–	–
10	VaR for SFTs						–	–
11	**Total**						**2 008 560**	**241 632**

TABLE 31: CVA CAPITAL CHARGE (EU CCR2)

		a	b
(in EUR 1000)		**Exposure value**	**RWAs**
4	All portfolios subject to the standardised method	85 027	5 638
5	Total subject to the CVA capital charge	85 027	5 638

TABLE 32: IRB APPROACH – CCR EXPOSURES BY PORTFOLIO AND PD SCALE (EU CCR4)

(in EUR 1000)		a	b	c	d	e	f	g
Exposure class	PD scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA ensity
Institutions	0.00 to <0.15	1 801 041	0.0004	8	0.2000	2.588	207 129	12%
	0.25 to <0.50	3 094	0.0026	1	0.2000	1.000	684	22.10%
	0.75 to <2.50	19 445	0.0326	2	0.2000	1.145	12 812	65.89%
	Subtotal	**1 823 580**	**0.0007**	**11**	**0.2000**	**2.5701**	**220 626**	**12.10%**
Corporates	0.00 to <0.15	8 244	0.0006	9	0.3500	1.000	1 148	13.92%
	0.15 to <0.25	43 174	0.0020	–	0.1150	2.301	4 416	10.23%
	0.25 to <0.50	11 802	0.0060	1	0.8100	3.446	6 612	56.02%
	0.50 to <0.75	154	0.0053	1	0.2885	1.023	45	28.98%
	0.75 to <2.50	557	0.0110	3	0.3579	1.000	358	64.36%
	2.50 to <10.00	1 124	0.0372	2	0.3618	1.000	1 033	91.92%
	Subtotal	**65 054**	**0.0076**	**16**	**0.5411**	**3.3284**	**13 611**	**20.92%**
Retail	0.15 to <0.25	113 468	0.0020	–	0.1150	5.000	5 602	4.94%
	0.25 to <0.50	6 291	0.0034	–	0.4600	5.000	1 755	27.90%
	0.50 to <0.75	168	0.0053	–	0.2875	5.000	38	22.64%
	Subtotal	**119 927**	**0.0021**	**–**	**0.1333**	**5.000**	**7 395**	**6.17%**
Total (all portfolios)		**2 008 560**	**0.0009**	**27**	**0.19648**	**2.701**	**241 632**	**12.03%**

TABLE 33: IMPACT OF NETTING AND COLLATERAL HELD ON EXPOSURE VALUES (EU CCR5-A)

		a	b	c	d	e
(in EUR 1000)		Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1	Derivatives	230 920	199 472	31 447	17 051	14 396
2	SFTs	1 694 336	–	1 694 336	92 600	1 601 736
3	Cross-product netting	83 304	–	83 304	82 334	970
4	**Total**	**2 008 560**	**199 472**	**1 809 088**	**191 985**	**1 617 103**

TABLE 34: COMPOSITION OF COLLATERAL FOR EXPOSURES TO CCR (EU CCR5-B)

	a	b	c	d	e	f
	Collateral used in derivative transactions				**Collateral used in SFTs**	
	Fair value of collateral received		**Fair value of posted collateral**		Fair value of collateral received	Fair value of posted collateral
(in EUR 1000)	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	–	6 661	–	331 290	–	–
Sovereign debt	13 615	–	29 878	–	–	–
Total	**13 615**	**6 661**	**29 878**	**331 290**	**–**	**–**

5. SECURITIZATION

5.1 SECURITIZATION

This chapter presents information on SG Luxembourg Group's securitization activities. SG Luxembourg Group does not carry out any securitizations as a sponsor. However SGCMF (a subsidiary of SG Luxembourg) invested in securitization assets ("Assets") fully financed by deposits with a limited recourse feature. The deposits are thus reimbursed only to the extent SGCMF receives repayment under the Assets. In 2017, SGCMF has issued a first loss guarantee in favour of SGPM which covers the first loss of a portfolio of assets selected by SGCMF among those which have been purchased by SGCMF in the normal course of its business. The first loss guarantee is collateralized by a cash deposit pledged for the benefit of SGPM. If triggered the first loss guarantee could result in a maximum loss of EUR 172 766 KEUR (at 31 December 2020).

In accordance with Regulation (EU) 575/2013, this investment is subject to the Securitization framework provided by Part 3, Title II, Chapter 5 of the Regulation and by the Regulation (EU) 2017/2402 laying down a general framework for securitization. It should be noted that there is no expectation that SG Luxembourg or any of its subsidiaries (other than SGCMF) will invest or undertake additional securitization activities.

For prudential purposes, this first loss guarantee is considered as a banking book exposure, where the bank invests in a synthetic securitization. This first loss is risk-weighted at 1250%. This thus generates total risk-weighted assets of 2 159 573 KEUR (at 31 December 2020).

5.2 ACCOUNTING METHODS

This first loss guarantee is recorded at amortized cost represented as the conclusion of a guarantee commitment together with a cash deposit whose cash flows are "Solely Payment of Principal and Interest". The guarantee commitments given are subject to an Expected Credit Loss (ECL) provision. This ECL is thus accounted under IFRS 9 upon conclusion of the commitment.

5.3 MONITORING OF SECURITIZATION RISKS

In term of risk governance, the Assets covered by the first loss guarantee are selected through a two-step mechanism:

I. at inception, Assets may be selected when SGCMF invests for the first time in a given Asset: SGCMF analyses the risks associated to the new Asset based on a traditional credit analysis and then decides that the exposure is eligible to the first loss guarantee.

II. at each renewal of the first loss guarantee, SGCMF performs an acceptance committee and decides which exposures will remain or be added to or excluded from the first loss guarantee.

Securitization risks are monitored through a quarterly portfolio review according to the rules established by SG Group based on the pool of underlying assets. The maturity is short (1-6 months) and renewable at SGCMF's initiative, allowing SGCMF to remain agile in the management of its risk profile, and be able to quickly adjust to a deteriorating credit environment if needed.

6. MARKET RISKS

Market risks are the risks of loss of value on financial instruments arising from changes in market parameters, the volatility of these parameters, and the correlations between them. These parameters include, but are not limited to, exchange rates, interest rates, prices of securities (equities or bonds), commodities, derivatives and other assets. They concern all trading book transactions.

6.1 ORGANIZATION

Market risk is managed through procedures that explain how and when to activate and monitor limits for SG Luxembourg independently and for its subsidiaries.

Although primary responsibility for risk monitoring naturally falls onto front office managers, the oversight mechanism also relies on independent structures.

From an organisational viewpoint, responsibility for managing market risk within SG Luxembourg Group is distributed as follows:

- Societe Generale Group's Market Risk Department establishes the risk measurement methods and control procedures, centrally handles Societe Generale Group's market risk reporting, examines and validates the limits requests from the various activities;
- The entities of SG Luxembourg Group bearing market risk (SG Luxembourg and SGPB Switzerland) have a dedicated risk team, independent from the business lines, in charge of managing risks resulting from market activities. From November 2018, this function is under the accountability of the Risk department.

The supervision of market risk primarily covers:

- The daily calculation of market risks, based on a formal and secured procedure;
- The daily monitoring of compliance with the limits notified for each activity;
- The preparation of a daily report on the use of the limits, sent to the general management of the entities concerned, to the front office and to Societe Generale Group's market risk department.

6.2 INDEPENDENT PRICING VERIFICATION

Market products are marked to market, when such market prices exist. Otherwise, they are valued using parameter-based models.

The prices provided by the counterparties are verified daily by the Risk Division comparing them to prices produced by internal models. Each internal model is independently validated by the Market Risk Department of SG Group, including the validity of the market data sources used.

6.3 METHODS FOR MEASURING MARKET RISK AND DEFINING LIMITS

The SG Luxembourg Group policy is to strictly limit market risk taking, in particular through the implementation of very low limits with regard to the SG Luxembourg Group's capital, and restrictions on the nature of instruments held.

For some entities, including SGPB Monaco, the ability to be exposed to market risk is excluded from the business model (systematic and "line to line" hedging of client operation through a symmetrical transaction concluded with SG Luxembourg). For others (SG Luxembourg and SGPB Switzerland), very low limits are set up and are strictly monitored (see below).

SG Luxembourg and subsidiaries exposed to market risk are using SG's methodology and applications to properly monitor market risk exposures. The market risk assessment is mainly based on three daily indicators, which are monitored through limits.

- 99% Value at Risk (VaR) and Stressed Value-at-Risk (SVaR) in accordance with the internal regulatory model used to calculate capital: synthetic indicator for day-to-day monitoring of market risks incurred by SG Luxembourg as part of its trading activities. The "historical simulation" method is used, which takes into account shocks and correlations between various markets using a one-day horizon calculated on a rolling one-year basis (for the VaR) and on a stresses annual window chosen a long-term period (for the SVaR).
- The Market Stress Test, which consists of a series of historical (scenarios already observed in the past) and hypothetical (scenarios defined with bank economists) multi-factor stress tests allows to take into account extraordinary market disruptions with a 10-year occurrence. These indicators estimate the loss resulting from a severe change in market parameters over a time horizon corresponding to the time needed to unwind or cover the positions in question. The Market Stress Test limit covers the most impaired of these scenarios.
- An "Emerging Countries" stress test combining shocks calibrated to the history of fluctuations observed in the past. The calibration is created from the 99% quantile of the shock distribution by risk factor for each country. An aggregation by country, region, and worldwide is used to quantify the risk by geographical area. The Stress Test limit relates to the most sensitive area.

These scenarios are supplemented by a set of adverse stress tests calculated by activity or risk factor to take extreme risks on a specific market into account (dislocation, liquidity, concentration, etc.).

"Sensitivity" and "nominal" indicators control position size: sensibilities are calculated using the major valuation risk factors (e.g. sensitivity of an option to changes in underlying asset prices); nominal values are used for significant positions in terms of risk.

These indicators are bounded by a set of limits, defined and calibrated by the Risk Division in coordination with the Front Offices.

6.4 RISK-MITIGATION AND HEDGING

The hedging strategy depends on the type of activity. Only foreign exchange activity is generating market risk exposure for SG Luxembourg Group and classified in the trading book. The residual FX positions are held in case of impossibility, for Front Office, to hedge the position under convenient market conditions. These exposures are bound by very low limits so that, in case of loss occurrence, this will not have significant impact on the P&L of SG Luxembourg.

6.5 MARKET RISK CAPITAL REQUIREMENTS

SG Luxembourg Group applies the standardized approach to measure its minimum capital requirements. The breakdown of the RWAs and equivalent capital requirements are provided in the next table:

TABLE 35: MARKET RISK UNDER THE STANDARDISED APPROACH (EU MR1)

		a	b
(in EUR 1000)		**RWAs**	**Capital requirements**
1	Interest rate risk (general and specific)	1 175	94
2	Equity risk (general and specific)	–	–
3	Foreign exchange risk [3]	–	–
4	Commodity risk	29 838	2 387
9	**Total**	**31 013**	**2 481**

[3] SG Luxembourg Group does not have minimal capital requirements for foreign exchange rate risk because it does not meet the de *minimis* threshold as set by the Capital Requirements Regulation 575/2013.

7. OPERATIONAL RISKS

Operational risks correspond to the risk of losses resulting from inadequacies or failures in processes, personnel or information systems, or from external events.

7.1 OPERATIONAL RISK MANAGEMENT: ORGANIZATION AND GOVERNANCE[4]

SG Luxembourg strives to strictly limit its operational risks and participates in the approach of strengthening the management and oversight of operational risks that the Société Générale Group has had in place for several years. This approach is overseen by the operational risk department, which belongs to the Risk Division of the Société Générale.

These include, among others, the monitoring of losses and incidents, managerial supervision, Risk and Control Self Assessment, business continuity plans, the New Product Committees, and specific complementary schemes dedicated to the management of compliance risks and information system security risks.

The Operational Risk Department

The Operational Risk Department within the Societe Generale Luxembourg Risk Division (LoD2) works in close cooperation with operational risk staff in the core businesses and Corporate Divisions (LoD1).

The Operational Risk Department is part of the second line of defense and is notably responsible for:

- organising the Operational Risk function (policy and standard);
- managing schemes for first-level permanent control of SG Luxembourg and organising the managers coordinating first-level permanent control;
- designing and implementing the Group's operational risk management system, in particular: tracking and collecting system for operational incidents, challenging Risk and control Self Assessment, monitoring of controls of first line of defense (managerial supervision);
- promoting high vigilance of operational risk within the Group;
- combatting fraud;
- contributing on new product committee (NPC) and outsourced externalized supervision (OES). Process, which is under corporate secretary supervision.

The Control Department

Performing second level of permanent control following an annual plan based on a risk approach.

Their objectives are the verification of the definition and the effective performance of Level 1 permanent controls and the quantitative and qualitative review of their results and the review of the performance quality of controls and the correction of anomalies.

The department is now on corporate secretary supervision as NPC and OES.

The Business Continuity function (preparing the overall SG Luxembourg business continuity and crisis management policy, managing the policy and coordinating its implementation) and **the department in charge of Information System CyberSecurity** (information cybersecurity policy definition and governance, access management, prevention of information leaks, anonymization rules, application security definition and governance, prevention and awareness-building, particularly with respect to cybercrime) are both conduct their activities under **SG Luxembourg COO**.

[4] Non-compliance and reputational risk are presented in detail in Chapter 10.

The Operational Risk function

In addition to the Operational Risk Department, the Operational Risk function includes Operational Risk Managers (ORMs) in the business lines and Supports functions, who are generally under the authority of the different Chiefs Operational Officers. They constitute the first line of defense and are the primary stakeholders responsible for managing and monitoring their own risks. They must in particular:

- identify their own risk and ensure the implementation of the ongoing control system by assigning the necessary and sufficient resources and ensuring that employees are made aware of it;
- adapt the risk appetite within their scope of activity and incorporate it into the risk management culture;
- ensure compliance with the limits and policies set and alert the function in question and the higher-ups if those limits and policies are exceeded or ignored.

The governance is completed by:

- a NPC (New Product Committee) for approving the risk (including operational risk) of new activities or new products;
- a COVADAES (Comité de Validation des Deals SSL) for approving the risk (including operational risk) of new activities or new products dedicated to the business line SSL (Structured Solution and Leasing);
- a process for validating the subcontracting and outsourcing of activities and services.

These committees are under the responsibility of the Corporate Secretary and are chaired by an Authorized Director.

The decisions and conditions issued by these committees are recorded in Group tools (Impact for NPC and RAMOS for outsourcing).

This mechanism is supplemented by dedicated monitoring of the risk of the discretionary portfolio management and patrimonial engineering activities.

7.2 OPERATIONAL RISK MEASUREMENT

SG Luxembourg uses the internal models developed by SG Group. Since 2007, SG Luxembourg has used the Advanced Measurement Approach (AMA), as proposed by the Capital Requirements Directive, to measure operational risk and calculated capital needed.

Today the AMA covers more than 90% of the SG Luxembourg Group's total net banking income.

TABLE 36: OVERVIEW OF RWA ON OPERATIONAL RISK

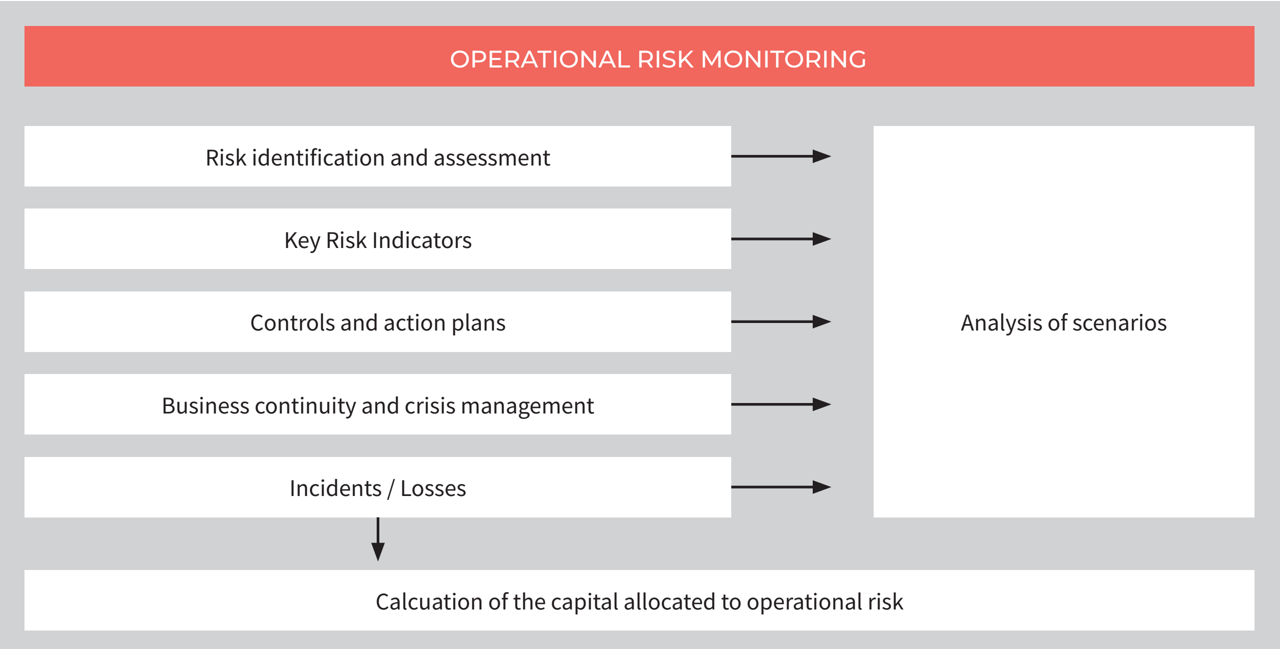
(in EUR 1000)	**RWA**
Operational risk	1 285 905
Of which basic indicator approach	82 468
Of which standardised approach	–
Of which advanced measurement approach	1 203 436

7.3 OPERATIONAL RISK MONITORING PROCESS

The frameworks specifically established by regulations have been implemented on the basis of existing procedures wherever possible.

They notably include:

- the gathering of internal data on operational risk losses;
- the analysis of external loss data (SG Group responsibility);
- the analysis of scenarios (SG Group responsibility);
- Risk and Control Self-Assessment (RCSA) processes;
- Key Risk Indicators (KRI);
- permanent second-level control;
- crisis management and business continuity planning;
- combating fraud;
- New Product Committees;
- the monitoring of external service providers.



Although primary responsibility for risk management falls on the business lines and support staff, which must promote operational risk culture within their teams on a daily basis, the tracking mechanism relies mainly on four processes overseen by the operational risk departments within the Group:

The periodic Risk and Control Self-Assessment (RCSA) which aims to:

- identify and assess the intrinsic operational risks to which each activity of the Group is exposed (disregarding prevention and mitigation measures);
- assess the quality of the prevention and mitigation measures in place for reducing those risks;
- measure the risk exposure of each Group business that remains once the risk prevention and mitigation measures are taken into account (the "residual exposure"), while disregarding insurance coverage;
- implement, if warranted, corrective action plans.

Internal collection of operational risk incidents with an exhaustive, timely declaration of any gains or losses from the very first euro, providing all the information needed to analyze them while issuing corrective actions that include the degree of criticality, a deadline, and the designation of a person responsible.

Analyses of scenarios are initiated and overseen within the Risk Division of the SG Group, targeting functions and processes that are particularly sensitive within the Bank. These analyses are particularly aimed at assessing potential low-frequency but high-severity losses and contribute to the calculation of capital requirements on the Group level.

The permanent control system with leadership and coordination, over the entire scope of a set of first-and second-level controls.

First-level permanent control is defined as all of the measures taken on a permanent basis to ensure the compliance, security and validity of transactions performed at the operational level. Operational managers must exercise managerial oversight over all of their respective processes, focusing as a priority on the most significant risks and sensitive procedures, with reference to the library of SG Group standard controls. The measures of controls are formalized in a unique tool MyAPRC.

Second-level control (Control department) aims to verify that the first level of control was properly carried out and that risks are being appropriately covered.

This system is accompanied by producing and tracking key risk indicators, some of which will have goals to achieve or tolerance thresholds set for them.

Furthermore SG Luxembourg has defined **an information security policy and ensures its enforcement**. This policy covers the management of computer access and rights, the prevention of information leaks, rules of anonymity, the conducting of intrusion tests, and the monitoring of the bank's websites. Prevention and employee awareness-raising campaigns are conducted regularly in conjunction with the implementation of a Clean Desk policy.

These processes are supplemented by a **crisis management mechanism and a business continuity plan**, the purpose of which is to develop the inherent capacity of the Bank's activities to withstand crises. This is done by combining the organisations' own capacities (robust systems) and special resources (business continuity plans).

On another note, the Group's constant innovations in terms of the products and services proposed to its clients must be approved by a New Products Committee, which determines the necessary conditions, in terms of both operations and acceptable risks, including an analysis of compliance risks.

7.4 OPERATIONAL RISK MODELLING, INSURANCE AND CAPITAL REQUIREMENTS

SG Luxembourg uses the same methodology as SG Group for operational risk modeling. This methodology is based on the loss distribution approach (lda).

Under this approach, operational risks are modeled using segments, each segment representing a type of risk and a Group core business. The frequency and severity of operational risks, based on past internal losses, external losses or scenario analyses, are estimated and the distribution of annual losses is calculated for each segment. This approach is supplemented by cross-business scenario analyses that measure cross-business risks for core businesses, such as, for example, property destruction and pandemic risks.

Aside from the individual risks associated with each segment or cross-business scenario analysis, the model takes into account the diversification between various types of risks and core businesses, as well as the effect of insurance policies underwritten by the Group.

The Group's regulatory capital requirements for operational risks within the scope eligible for the AMA (Advanced Measurement Approach) internal model are then defined as the 99.9% quantile of the Group's annual loss distribution.

In terms of allocation: The first allocation is carried out at the business level based on their Stand Alone Capital Charge adjusted for their contribution to risk diversification (Shapley Method).

The second allocation is performed at the entity level based on a 50/50 internal losses and budgeted NBI contribution key.

Criterion No. 1: internal losses

The internal losses are retained for their net amount after recovery of insurances on a five years time laps. The most significant losses are capped to avoid over-representation of the entities having recorded large losses and a shortage of capital allocated for those without losses history.

Criterion No. 2: revenue.

This is measured through the budgeted NBI.

TABLE 37: VENTILATION ON AMA MODEL FOR SG LUXEMBOURG (AT GROUP LEVEL)

	Capital Allocation (KEUR)	
Business Line	**Q4 2019**	**Q4 2020**
Private banking	47 239	43 624
Corporate Center	19 808	20 359
Financing Solution	11 096	5 570
Global Markets Investor Services	45 691	26 519
Retail Banking	304	203
Total	**124 138**	**96 275**

At SG Luxembourg Group level, the amount allocated amounts in AMA is 96 MEUR (against 124 MEUR in 2019). The 28 MEUR decrease can be explained by:

- The change in SGIS consolidation method from the prudential perimeter (16,5 MEUR 58%) with impact Financing Solution
- The combined decline in NBI at the level of the SG Group's envelope and SGL's business lines
- Decrease of historical operating losses at SG Group level (shift in the reference period – last 4 years) especially on Global Market investor

Insurance cover in risk modelling

The insurance policies cover part of the Group's major risks, i.e. civil liability, fraud, fire and theft, as well as systems interruptions and operating losses due to a loss of operating resources.

8. STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

Structural interest rate (also referred to as Interest Rate Risk in the Banking Book – IRRBB) and foreign exchange rate risks result from commercial activities and their hedging transactions, as well as from own account transactions performed by the SG Luxembourg consolidated entities. SG Luxembourg Group measures and strictly controls structural risks. Interest rate and foreign exchange risks related to the trading portfolio do not fall within the scope of structural risk measurement. They fall under market risks.

The general principle is to reduce structural interest rate and exchange rate risks to the greatest extent possible within the consolidated entities. Wherever possible, commercial transactions and corporate centre operations within entities are hedged against interest rate and exchange rate risks, either through micro-hedging (individual hedging of each commercial transaction) or macro-hedging techniques (hedging of portfolios of similar commercial transactions within a treasury department).

8.1 ORGANIZATION OF THE MANAGEMENT OF STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

The principles and standards for managing these risks are defined at the SG Group level. The entities are first and foremost responsible for managing these risks. The ALM (Asset and Liability Management) Department within the SG Luxembourg's Finance Division supplements the control framework.

The SG Group Finance Committee, a General Management body

The SG Group Finance Committee:

- validates and oversees the structural risk monitoring, management and supervision system;
- reviews changes in the SG Group's structural risks through consolidated reporting;
- examines and validates the measures proposed by the SG Group's Finance Division.

The ALM Department within the Finance Division

The ALM Department is responsible for:

- defining the structural risk policies for SG Group and formalising risk appetite for structural risks;
- defining the steering indicators and overall stress test scenarios for the different types of structural risk and setting the main limits for the business divisions and the entities;
- analysing SG Group's structural risk exposure and defining hedging strategies;
- monitoring the regulatory environment concerning structural risk;
- defining the ALM principles for SG Group;
- defining the normative environment of structural risk metrics, modelling methods and framework;
- validating the models used by SG Group with regard to structural risks, validated together with the Risk Division and the business lines;
- inventorying, consolidating and reporting on SG Group structural risks;
- monitoring compliance with structural risk limits.

The ALM Risk Control Department within the Risk Division

The second-level supervision covering both (1) the ALM models used within SG Group and (2) the associated frameworks is provided by a dedicated service within the Risk Department. Accordingly, this department provides an opinion on the methodological principles, parameters and back tests of ALM models. It analyses proposals from the ALM Department regarding the risk indicators, stress test scenarios and structural risk frameworks. It also conducts second-level controls of the risk limits comprising such frameworks. The Risk Department organises and chairs the Model Validation Committee.

SG Luxembourg is responsible for structural risk management

In this respect, SG Luxembourg applies the standards defined at SG Group level, develop their own models, propose their limits (for approval by local management and SG Group committees), measure their risk exposure and implement the required hedges.

SG Luxembourg has its own structural risk manager, who reports to Finance Division and is responsible for conducting first-level controls and for reporting to SG Group Finance Division via a shared IT system. For SG Luxembourg, this role is played by the head of ALM/Treasury department. The ALM committee is then responsible for monitoring the indicators and implementing the hedging programme.

8.2 STRUCTURAL INTEREST RATE RISK (INTEREST RATE RISK IN THE BANKING BOOK – IRRBB)

The Banking Book covers the banking activities (lending and borrowing money, holding and issuing securities and gathering deposits) aimed primarily at generating profits through excess earning from assets over the cost of liabilities. Within SG Luxembourg, the Banking Book covers on-balance sheet operations resulting from client activities (e.g. loans and deposits), operations (on and off balance sheet) originated by SG Luxembourg treasury department in order to hedge the risks resulting from these client activities as well as proprietary transactions to manage regulatory requirements (e.g. sovereign bond portfolio).

Objective of the Framework

When steering structural interest rate risk, the main aim is to ensure the risk is managed by reducing SG Luxembourg exposure to structural interest rate risk as far as possible.

IRRBB steering framework is defined at the Group level and then transposed to each entity. The risks are monitored at each entity level within dedicated thresholds and limits. On an annual basis, the SG Group Finance Committee updates the limits applicable to each entity.

Measurement and monitoring of structural interest rate risk

In 2020, SG Luxembourg structural interest rate risk management relied on a set of four metrics in which three are framed by limits and thresholds (80% of the limit for each scenario). All the metrics are monitored on a monthly basis.

Interest Rate gap – outstanding fixed rate principal (net of fixed rate assets and fixed rate liabilities) broken down by time bucket.

Value sensitivity

- NPV sensitivity – Net Present Value sensitivity of fixed rate residual positions to interest rate changes according to several interest rate scenarios. – *covered by internal limits*.
- EVE sensitivity – Economic Value of Equity sensitivity represent the NPV after exclusion of own funds, investments in subsidiaries and intangible assets. – *covered by regulatory limits*.

Revenue sensitivity

- NIM sensitivity – based on a constant balance-sheet hypothesis. – *covered by internal limits*.

Assets and liabilities are analysed independently, without any a priori matching. The amortization profiles of assets and liabilities are determined on the basis of the contractual terms of transactions, models based on historical behaviour patterns (e.g. regulated savings accounts and early loan repayments), and to a lesser extend conventional assumptions relating to certain balance sheet items (shareholders' equity and equity holdings in consolidated entities).

All the limits and thresholds described in this section are presented at each ALM Committee against the current risk levels and variations of the risk levels are detailed such that management can monitor the evolution of the risk profile.

The NPV sensitivity is computed based on a parallel shift of the whole yield curve of +/-10bp, a non-parallel short-term rates up shock (NIRUP), and a non-parallel short-terms rates down shock (NIRDW).

TABLE 38: SG LUXEMBOURG NPV POSITION AS OF 31/12/2020

		+10 bps	-10 bps	NIRUP	NIRDW
SG Luxembourg	**Limit**	(17.48)	(17.48)	(142)	(85.4)
	Threshold	(14)	(14)	(113.6)	(68.3)
	31/12/2020	(0.08)	(0.99)	(6.20)	(4.23)

EVE sensitivity is computed on a parallel shift of the whole yield curve of +/-200bp as well as based on the 6 EBA scenarios. SG Luxembourg ALCO and Board of Directors are notified on each interim balance sheet date of the results of the "Supervisory Outlier Test" ("SOT") as defined in articles 113 and 114 of the IRRBB EBA guidelines. These tests are based on EVE sensibility:

- According to article 113, the EVE decrease to +/- 200bp interest rates shocks shall remain below 20% of the entity's regulatory capital Tier 1 and Tier 2 ("SOT 113").
- According to article 114, the EVE decrease to interest rates shocks corresponding to the 6 scenarios detailed in Appendix III of the EBA guidelines shall remain below 15% of the entity's Tier 1 capital ("SOT 114").

NIM sensitivity is computed based on a parallel shift of the whole yield curve of +/-10bp, a parallel shift of the whole yield curve of +/-200bp as well as based on the 6 EBA scenarios. The limit framework has been enhanced with the introduction of a set of limits for the NIM sensitivity over 1 and 2 years (+/- 10 bps scenarios) for SG Luxembourg with a monthly monitoring.

TABLE 39: SG LUXEMBOURG NIM POSITION AS OF 31/12/2020

		Year 1 +10 bps	Year 1 -10 bps	Year 2 +10 bps	Year 2 -10 bps
SG Luxembourg	**Limit**	(11.25)	(11.25)	(15)	(15)
	Threshold	(9)	(9)	(12)	(12)
	31/12/2020	5.5	(5.5)	8.3	(8.3)

8.3 STRUCTURAL FOREIGN EXCHANGE RATE RISK

Fluctuations in inter-currency exchange rates may result in a change in the value of some assets, liabilities, and off-balance sheet items and may lead to volatility in the income statement or other gains and losses recognized in equity. Structural foreign exchange risk is primarily attributable to residual positions on and off the balance sheet (difference per currency in assets and liabilities).

Objective of the Framework

SG Luxembourg Group policy consists of hedging its exposure to currency fluctuations by endorsing all on and off-balance sheet positions and controlling residual exposure by setting low limits.

Measurement and monitoring of structural foreign exchange rate risks

SG Luxembourg Group quantifies its exposure to structural foreign exchange rate risks by analysing all assets and liabilities denominated in foreign currencies arising from commercial transactions and the corporate centre, and manage it with tight limits (3 MEUR of Asset and Liability mismatch for the main currencies).

TABLE 40: SG LUXEMBOURG GROUP FOREIGN EXCHANGE POSITION AS OF 12/31/2020

Indicators	Targets and limits	31/12/2020 in MEUR
Structural exchange rate risk	**≤ 7.1 MEUR (target)** **≤ 9.5 MEUR (limit)**	0.85

9. LIQUIDITY RISK

Liquidity risk is defined as the SG Luxembourg's inability to meet its financial obligations at a reasonable cost: debt repayments, collateral supply. SG Luxembourg assesses this risk over various time horizons, including intraday, taking into account market access restriction risk (generalized or specific to SG Luxembourg).

9.1 GOVERNANCE AND ORGANIZATION

Liquidity indicators have been defined and specific limits approved by the Board of Directors. On a quarterly basis these indicators are presented to the Board of Directors.

The department in charge of managing and steering the liquidity position of the SG Luxembourg Group is the ALM/Treasury team, within the SG Luxembourg Finance division, and which has functional links to both the SG Group ALM and the SG Group Treasury departments.

Additional liquidity indicators are monitored during the monthly ALM Committee of the bank, which gathers SG Luxembourg management (CEO, CRO, CFO) and SG Group representatives.

9.2 THE APPROACH TO LIQUIDITY RISK MANAGEMENT

SG Luxembourg Group's primary objective is to ensure the funding of its activities in the most secure and cost-effective way by managing liquidity risk and adhering to regulatory constraints. The liquidity steering system provides a balance sheet framework based on assets and liabilities target structure that is consistent with the risk appetite defined by the Board of Directors:

- The assets structure should allow the businesses to develop their activities in a way that is liquidity-efficient and compatible with the target liabilities structure. This development must comply with the liquidity gaps defined at SG Luxembourg Group level (under static and stress scenarios) as well as regulatory requirements;
- The liabilities structure is based on the ability of the businesses to collect financial resources from customers.

This steering system is based on measurement and supervision of the businesses liquidity gaps under reference and stress scenarios, their funding needs, the eligible assets and the businesses contribution to regulatory ratios. Accordingly, the principles of liquidity management are as follows:

1. The businesses maintain low to nil static liquidity gaps of their activities, by using the SG Luxembourg Group's Treasury, which can, if needed, run a transformation position and manage it within the framework of the established risk limits.
2. Internal liquidity stress tests, established on the basis of combined (systemic and idiosyncratic) scenarios, are controlled at SG Luxembourg Group level. They are used to ensure compliance with the survival horizon established by the Board of Directors and to calibrate liquidity reserves. They are accompanied by a Contingency Funding Plan that sets out measures to be taken in the event of a liquidity crisis.
3. The businesses' funding needs (short-term and long-term) are determined on the basis of the development objectives and in line with the SG Luxembourg Group's fund-raising targets and capabilities.
4. A plan for long-term funding, which complements the resources raised by the businesses, is designed to cover upcoming repayments and finance the growth of the businesses.
5. SG Luxembourg Group's short-term resources are adapted to the financing of the businesses' short-term. As outlined above, they are adjusted in light of the liquidity reserve on the assets side, based on the established stress survival horizon as well as the SG Luxembourg Group's LCR target (Liquidity Coverage Ratio, see Regulatory Ratios section).
6. SG Luxembourg Group's liquidity steering takes into account compliance with the target regulatory ratios (LCR, NSFR) and

internal ratios (Liquidity Gap in a business as usual situation and in a stress situation).

Finally, liquidity is governed in terms of cost via the SG Luxembourg Group's internal transfer pricing scheme. Funding allocated to the businesses is charged to the latter on the basis of scales that must reflect the liquidity cost for SG Luxembourg Group. This system is designed to optimise the use of external financing sources by businesses, and is used to monitor the equilibrium of balance sheet funding. The liquidity gap is managed on an overall basis (across all currencies) and by main currency (which currently are EUR, USD and CHF).

9.3 REFINANCING STRATEGY

To manage its liquidity position and refinancing needs, SG Luxembourg Group mainly relies on:

- its private banking business (Luxembourg, Monaco, Switzerland), structurally providing long term liquidity, with more deposits than loans originated, and
- its cash management business for international and large corporate, and
- the SG Group central Treasury.

9.4 DISCLOSURE ON ASSET ENCUMBRANCE

An asset shall be treated as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralize or credit enhance any transaction from which it cannot be freely withdrawn.

Total SG Luxembourg Group encumbrance amounts to less than 10% in 2020, measured according to EBA definition. Encumbrance at SG Luxembourg Group level mainly arises from regular liquidity buffer monetization (through repo operations) and SGCMF assets securitization.

A few points are noteworthy:

- Apart from SG CMF whose encumbrance is structural to its core activity of securitization, the other sources of encumbrance at SG Luxembourg Group level are required by the regulation (buffer monetization, central bank reserves, EMIR) or absolutely marginal to the total balance-sheet of the entity (margining).
- As such, there is no appetite at SG Luxembourg Group level for asset encumbrance at larger scale above on what is being used today.

TABLE 41: ENCUMBERED AND UNENCUMBERED ASSETS

		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
(in 1000 EUR)		010	030	040	050	060	080	090	100
010	**Assets of the reporting institution**	11 039 157	1 255 455	–	–	44 542 958	12 279 999	–	–
020	Loans on demand	289 732	289 732	–	–	9 954 501	9 954 501	–	–
030	Equity instruments	–	–	–	–	123 463	–	123 463	–
040	Debt securities	7 627 239	622 164	7 627 239	622 164	2 712 688	2 325 499	2 712 688	–
050	*of which: covered bonds*	–	–	–	–	–	–	–	–
060	*of which: asset-backed securities*	–	–	–	–	–	–	–	–
070	*of which: issued by general governments*	*622 164*	*622 164*	*622 164*	*622 164*	*2 325 499*	*2 325 499*	*2 325 499*	–
080	*of which: issued by financial corporations*	*7 005 075*	–	*7 005 075*	–	*387 189*	–	–	–
090	*of which: issued by non-financial corporations*	–	–	–	–	–	–	–	–
100	Loans and advances other than loans on demand	*2 776 709*	–	–	–	*30 714 863*	–	–	–
110	*of which: mortgage loans*	–	–	–	–	*3 287 525*	–	–	–
120	Other assets	345 477	343 559	–	–	1 037 443	–	–	–

TABLE 42: COLLATERAL RECEIVED

		Fair value of encumbered collateral received or own debt securities issued		Unencumbered – Fair value of collateral received or own debt securities issued available for encumbrance	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
(in 1000 EUR)		010	030	040	060
130	**Collateral received by the reporting institution**	–	–	–	–
230	Other collateral received	–	–	–	–
250	**TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED**	**11 039 157**	**1 255 455**		

TABLE 43: SOURCES OF ENCUMBRANCE

		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
(in 1000 EUR)		010	030
010	**Carrying amount of selected financial liabilities**	10 741 409	10 741 409
020	Derivatives	337 461	337 461
030	of which: Over-The-Counter	337 461	337 461
040	Deposits	10 403 948	10 403 948
050	Repurchase agreements	622 164	622 164
070	Collateralised deposits other than repurchase agreements	9 781 784	9 781 784
120	**Other sources of encumbrance**	297 748	297 748
160	Other	297 748	297 748

9.5 REGULATORY LIQUIDITY RATIOS

The Basel Committee recommends the international implementation of two standard ratios with harmonized parameters, to regulate bank liquidity risk profiles:

- the Liquidity Coverage Ratio (LCR) aims to ensure that banks hold sufficient liquid assets or cash to survive a significant stress scenario combining a market crisis and a specific crisis and lasting for one month.
- the Net Stable Funding Ratio (NSFR) is a transformation ratio and compares funding needs with stable resources over a one-year period. As at 31 December 2020, SG Luxembourg is not subject to NSFR requirements.

During all the year, both regulatory Liquidity ratios remained above the targets and limits defined in SG Luxembourg Group Risk Appetite.

TABLE 44: SG LUXEMBOURG GROUP LCR AND NSFR

Indicators	Targets and limits	31/12/2020
Liquidity Coverage Ratio – LCR	≥ 110% (target) ≥ 100% (limit)	131%
Net Stable Funding Ratio – NSFR	> 85% for 2020 (target)	87.9%

TABLE 45: LCR DISCLOSURE TEMPLATE ON QUANTITATIVE INFORMATION OF LCR WHICH COMPLEMENTS ARTICLE 435(1)(F) OF REGULATION (EU) NO 575/2013

	Scope of consolidation (solo/consolidated) *Currency and units (K EUR)*	**Total unweighted value**	**Total weighted value**
	High-Quality Liquid Assets		
2	**Total high-quality liquid assets (HQLA)**		**12 022 106**
	Cash-Outflows		
	Retail deposits and deposits from small business customers, of which:	3 907 399	703 176
4	*of which: Less stable deposits*	3 907 399	703 176
5	Unsecured wholesale funding	13 486 109	10 014 605
6	*of which: Operational deposits (all counterparties) and deposits in networks of cooperative banks*	1 736 435	434 109
7	*of which: Non-operational deposits (all counterparties)*	11 749 674	9 580 496
10	Additional requirements	4 205 964	2 103 681
11	*of which: Outflows related to derivative exposures and other collateral requirements*	1 123 855	1 123 855
13	*of which: Credit and liquidity facilities*	3 082 109	979 826
14	Other contractual funding obligations	1 409 987	–
15	Other contingent funding obligations	81 165	41 165
16	**Total Cash Outflows**		**12 862 627**
	Cash-Inflows		
17	Secured lending (eg reverse repos)	–	–
18	Inflows from fully performing exposures	4 268 871	3 514 052
19	Other cash inflows	166 751	166 751
20	**Total Cash Inflows**	**4 435 621**	**3 680 803**
EU-20a	***Fully exempt inflows***	1 209	1 209
EU-20c	***Inflows Subject to 75% Cap***	4 434 412	3 679 593
			Total adjusted value
21	**Liquidity buffer**		**12 026 366**
22	**Total Net Cash Outflows**		**9 181 824**
23	**Liquidity Coverage Ratio (%)**		**131%**

10. COMPLIANCE, REPUTATIONAL AND LEGAL RISK

10.1 COMPLIANCE

Compliance means acting in accordance with applicable banking and financial rules, ranging from laws and regulations to professional, ethical or internal standards and principles.

By ensuring these rules are observed, SG Luxembourg Group works to protect its customers and, in general, all of its counterparties and employees. Protecting the company's image is one of the SG Luxembourg Group's strategic objectives.

The compliance framework

The system for prevention of compliance risks is based on a shared responsibility binding all core businesses, support functions and compliance function employees by ensuring the integration of compliance with local laws and regulations, rules of good professional conduct, and internal rules into their daily work.

The Compliance function has two main duties: (i) advising and assisting the operational teams so that they may complete their tasks in compliance with their professional and regulatory obligations, and in keeping with the SG Group commitments; and (ii) monitoring and assessing the relevance and efficiency of the system for monitoring and controlling compliance risks.

The Compliance team, reports to the SG Luxembourg Group General Secretary.

The Compliance function works in close coordination with the "Direction du Contrôle permanent" (CTL), which was created in 2018 and is dedicated to the assessment of the efficiency of the permanent supervision framework and standard controls defined at Group level.

The Legal, Human Resources, Tax, and Corporate Resources support the Compliance function within the scope of their respective fields of expertise.

The General Secretary is responsible for the overall coordination of the Compliance function and of relations with the authorities in this regard. She is assisted in her duties by the Head of Compliance. The efficiency of the compliance system is continuously monitored and strengthened at the highest level: Board of Directors and the Risk and Compliance Committee.

THE COMPLIANCE DEPARTMENT

The Compliance Department manages the compliance control and monitoring system and monitors reputational risk. It ensures the consistency of the SG Luxembourg Group system for prevention of compliance risks, its efficiency, and the development of appropriate relationships with banking supervisors and regulators.

COMPLIANCE DEPARTMENT ORGANIZATION

The Chief Compliance Officer relies on a team organized in six sections:

- International Private Banking and Compliance transformation
- Market integrity and client protection
- Anti-Money Laundering and Fight against Terrorism financing including Sanction and Embargo issues
- Governance, Risk Assessment and cross divisional thematics
- Compliance supervision of GLBA including Luxembourg banking subsidiaries
- Supervision of SGSS's activities (Depositary Agent and Transfer Agent).

In order to meet with requirements arising from the complexity of the regulatory framework and the implementation of SG Group's remediation plans, compliance function's capacity remained unchanged in 2020 compared to 2019. The Department was impacted by a significant staff turnover even if all vacancies have globally been filled along the year. Like other departments, CPLE has implemented measures to face the COVID 19 health crisis alternating on-site presence and home working. End of 2020, the Department counted thirty-three compliance officers directly reporting to either the Chief Compliance Officer or the two deputy CCOs. Regarding Compliance's missions, the scope extension continued in 2020, mainly driven by SG Group's La Fayette Program (set of Anti-Bribery, Sanction & Embargo and Index & Market Manipulation projects and controls), the Permanent Control Transformation and the KYC Transformation Programs.

APPLICATIONS DEDICATED TO COMPLIANCE ENFORCEMENT AND TO THE DEVELOPMENT OF A PROCESS-BASED APPROACH

Two types of IT applications ensure compliance with regulations and detection of situations requiring special attention:

- profiling/scenario management tools that trigger alerts when unusual account flows or transactions are detected. More specifically, they are used to prevent money laundering and terrorism financing, and to detect market abuse, price manipulation and insider trading;
- tools used to filter data based on pre-defined lists (internal lists, external databases, etc.) that trigger alerts upon detecting certain people, countries or activities targeted by national or international sanctions and embargoes, or people with convictions or having PEP (politically exposed person) status.

The Compliance function reports on specific key compliance risk areas and performs mapping and assessment of regulatory risks.

These processes are regularly updated and their features enhanced to incorporate regulatory and technological changes and improve their operational efficiency.

Moreover SG Luxembourg drawn-up an instruction dedicated to compliance incidents.

The bank has performed in 2020 the annual risk assessment initiated by SG Group, "COMPASS", on 18 compliance topics, including:

- Financial crime: Money laundering & terrorist financing (including KYC), Sanctions & Embargoes;
- ABC (Anti-Bribery & Corruption) – Ethics and Behaviors: personal dealing, compensation, corporate social responsibility, licenses and professional certifications;
- Client protection; sales processes, clients complaints, client assets protection, retail banking law (outside of the scope for SG Luxembourg), conflict of interest;
- Market Integrity: market abuse, Volcker/FBL Rules, other market integrity risks;
- Tax transparency: Fatca, CRS;
- Data & digital; data protection.

This Group exercise allows to construct a detailed map of areas of risk and to draft specific synthesis based on both inherent risk and mitigant analysis. In addition, findings issued from this risk assessment conducts to action plans to reinforce framework related to the identified risks.

The results of this risk assessment were shared with the Board of directors and the Authorized management during the Compliance & Risk Committee (17/06/2020).

2021 Campaign will focus on 5 topics (Sanctions and Embargoes, Conflict of Interest, Data Protection, Market Abuse and IMM and Benchmark) from January to April 2021.

Implementation of compliance policies

ANTI-MONEY LAUNDERING AND COUNTERING TERRORIST FINANCING (AML/CTF)

Measures aimed at increasing the efficiency of the AML/CTF system and the vigilance of SG Luxembourg Group employees were continued in 2020.

In particular, we can mention:

- AML/FT framework instruction N° 10022, which sets out the professional obligations in the area AML/FT obligations in detail, was updated in June to reflect the latest local regulatory and procedural developments within the Group. A V12 instruction is available;
- the implementation of the PRIV AML risk appetite;
- the implementation of the NOMOS Tool in the Commercial banking area;
- the continued deployment of the PCT program and the implementation of measures to cover the needs of the Bank's normative compliance controls on the AML theme (GPS, KRI,…);
- AML/PEP screening: Launch of the FIRCOSOFT PEP solution, aligned with the set-up Group. The SG Lux 2020 PEP review confirms an overall low exposition to high-risk PEP profiles.

KNOW YOUR CUSTOMER (KYC)

The Bank continued its targeted approach with respect to customer risk for all activities, both for on boarding and during regular KYC revisions of existing customers.

Regarding the onboarding, no new instructions have been issued. It is noted that on the private bank side, the relationship (EER)" procedure PR-20814 was updated in May 2020. This procedure describes the process for validating or refusing a new relationship that must be followed for every new relationship, existing client (PP, PM or UBO) or potential partner by the PRIV business. On the SGSS business line side, 3 procedures were updated: PR-20943 on KYC/AML direct clients, PR-21189 on KYC/SGSS and PR-21212 on AML/KYC DDIL.

Along side the business relationship:

- Launch of various initiatives regarding the Group KYC Transformation Program, including studies related to FCCR rating methodology implementation (GTPS and SGSS);
- The periodic committees set-up to rule on KYC / AML issues (including close follow-up PCR/KYC campaign) in the PRIV, GTPS, and SGSS business lines met throughout the year and have been rescheduled to meet again, on a monthly basis in 2021.

EMBARGOES AND FINANCIAL SANCTIONS

The international environment in 2020 remained very challenging, with a high level of complexity.

The year 2020 is characterised in particular by:

- Various deliveries of sanctions screening: daily filtering of repositories, filtering of the securities database, filtering of the HR database, filtering of exogenous flows, pre-trade filtering;
- Continuation of the S&E framework strengthening (La Fayette Program) with the production and reporting of dedicated Key Risk Indicators embedded in the Compliance Committee, deployment of new procedures (Level 2 Alert, Assets Freeze, incidents, US person…) and controls.

ANTI-CORRUPTION MEASURES

The fight against corruption is a global struggle that is intensifying. Many countries have anti-corruption laws and increasingly severe sanctions are regularly imposed on individuals and legal entities.

The La Fayette Program, set out in the Deferral Prosecution Agreement signed with the Parquet National Financier (PNF) and the American Department of Justice, continued in 2020. Hence, 18 Policies & procedures created/updated (KYS, FSP, HR Sanctions, HR Recruitment, Whistleblowing, Sponsoring & Patronage and Conflict of interest, Advocacy, Gifts and Events) during the last 2 years. A dedicated Governance mechanism has been implemented with clear roles & responsibilities (ABC Officer, ABC Manager) and an ad-hoc Committee put in place (ABC operational committee). The oversight on this thematic has been strengthened with the deployment of ABC Key Risk Indicators (KRIs), ABC dashboards (within COMCO and CRC) and a new set of controls.

EMPLOYEE ETHICS

SG Luxembourg has adopted the most recent version of the SG Group's Code of Conduct (February 2019), which was circulated to all employees and strengthened by Directive n°10260. This code has been supplemented by two codes of conduct, the "Tax Code of Conduct" dedicated to the major principles of tax compliance (July 2017) and the "ABC Code of conduct" (Anti Bribery and Corruption) related to combating corruption and insider influence (June 2018).

CPL continued to monitor ethics rules for personnel, which are documented at the beginning of each year by a specific report addressed to Authorized Management. This report relates to the transactions on financial instruments of agents declared as exposed personnel within the Bank, as well as any conflicts of interest and practices in terms of gifts, donations, advantages and external events organized by SG Luxembourg. The process in place is in line with regulatory and/or Group requirements.

The Group tool "WhistleB", rolled oud within SG Luxembourg in September 2020, allows the staff to exercise its right "to blow the Whistle". The facts reported may relate to inappropriate behaviour or failure to comply with our regulatory obligations and internal rules.

CONFLICTS OF INTEREST

The Bank must take all appropriate measures so as to detect, avoid and/or manage conflicts of interest arising between itself (including its senior executives, employees and when needed its tied agents or any person linked by a control relationship) and its clients or between two clients, including conflicts resulting from the collection of incentives from third parties or from the remuneration structure and other incentive structures specific to the Bank.

To meet its obligations, the Bank has a policy for the management of conflicts of interests and it maintains and updates a log of the types of investment or ancillary services or investment activities carried out by the company or in its name, and for which a conflict of interests that includes any risk of harm to the interests of one or more clients could arise. The log is updated with the new types of conflicts of interest annually or when necessary.

The Bank publishes the summary of its conflicts of interest policy on its Internet site in order to meet the communication requirements imposed by the regulation. The general terms also mention the publication of a summary of the policy on the Bank's Internet site. The complete conflicts of interest policy is made available to clients on request, and is distributed to all personnel members.

MARKET ABUSE

Following the entry into force of the new regulation on market abuse (Regulation N° 596/2014 and Directive 2014/57 of the European Parliament and of the Council of the 16/04/2014 and the resulting Luxembourg law of 27 December 2016), a framework procedure describing the general context of the offences of insider trading and price manipulation and the embedding the corpus of common rules applicable to the entire SG Group was updated on 5 January 2017 and amended on 13 November 2019.

A detection tool to monitor the Market Abuse risk, approved by the CSSF and the ECB is in place and a dedicated "Market Abuse Committee" took place in July 2020.

In response to its supervision obligations, Société Générale Private Banking has decided to implement a single common tool to monitor the activity of all of its European entities. The selected solution (Accelus Market Surveillance – "AMS") is a Saas solution "distributed by the supplier Refinitiv.

A market manipulation risk assessment's exercise was led at the beginning of 2020, under the scope of the La Fayette Société Générale Group program to determine the effectiveness of the control framework established within SG Luxembourg in order to detect and determine market abuses.

SUPERVISING CUSTOMER PROTECTION

The year continued to see local work aimed at integrating obligations from the entry into effect of MiFID 2 to cover regulatory requirements in terms of client protection (i.e. Customer and product classification, suitability and appropriateness tests, information and reporting, obligation of best execution, processing orders, inducements, conflict of interests, transparency, records and product governance).

CLAIMS AND MEDIATION

MiFID2 strengthens the requirements for the handling of complaints. The Bank has a transparent policy for managing complaints for the purposes of their quick handling. Clients are informed of the existing mechanism, including the possibility of transferring their complaint to an out-of-court dispute settlement entity, via the general terms and the Bank's Internet site.

The Bank also maintains a log of complaints received and of the measures taken to resolve them.

OTHER REGULATORY MATTERS

Following the measures taken regarding the COVID 19 pandemic crisis, no face-to-face training has taken place since March 2020 except an AML training (skype meeting) during the Board of Directors on 11/26/2020 (29 attendees).

In 2020, in cooperation with the business lines, the Compliance function continued development and compliance workshops covering numerous important regulations, in particular: MiFID2, the General Data Protection Regulation "GDPR", Cross border, CRS, US TAX Forms FATCA", "QI", "871 M", "EMIR", Maket Abuse, conflict of Interest, code of conduct, risk appetite, …

NORMATIVE DOCUMENTATION AND INFORMATION SHARING

To complete its assignments, the SG Luxembourg Group Compliance function relies on normative documents (directives, guidelines and procedures) which are regularly updated. New instructions were drafted and published in 2020 regarding the topics QI, S&E, Freezing of assets, incidents follow-up, insiders list follow-up, Level 2 Transactional Alert, GDPR, EMIR, MiFID, Whistleblowing.

THE PERMANENT CONTROL SYSTEM

The Compliance function is one of the three control functions of the SG Luxembourg Group (together with the risk and internal audit), in charge of second-level control to review the quality of the checks performed by the businesses.

The roll-out of the Permanent Control Transformation Program (PCT) continued in 2020 and new GPS controls dedicated to various CPLE topics were rolled-out. The APRC delivery schedule was respected and a roadmap focused on the qualitative review of the control needs mapping was validated.

Compliance and the Code of Conduct

Compliance with ethical rules that meet the highest professional standards is part of the SG Group's commitments.

No culture and conduct workshops have been conducted in 2020, due to the COVID 19 pandemic crisis. The SG Luxembourg Group has a set of strict good conduct doctrines and rules. The SG Group's Code of Conduct is covered by an internal instruction which has been enriched by a Code dedicated to Anti-Bribery and Corruption thematic. Theses instructions apply to all employees, regardless of their responsibility level, as well as to SG Luxembourg Group managers, and also specifies alert procedures when a special situation so requires. In 2020, all employees have followed an e-learning's training session dedicated to the code of conduct.

10.2 RISKS AND LITIGATION

The information pertaining to risks and litigation is included in Note 8 and 9 from the consolidated financial statements.

11. RISKS RELATING TO INSURANCE ACTIVITIES

SG Luxembourg owns 100% of Société Générale Ré (SG Ré), whose business is the reinsurance of certain insurance risks of the SG Group. The company has implemented a system of governance and risk management aimed at protecting the shareholder's interests, which relies on:

- A governance framework, aligned with the strategic goals assigned to SG Ré.
- A risk management system that adapts the policies for, among other things, solvency, subscription/provisioning, investment, ALM, liquidity/concentration, operational, and on-lending risks, whose indicators are tracked in a risk appetite grid.
- An internal control system based on architecture of processes and a full set of associated controls.
- A log of the risks to which SG Ré is exposed, detailing the risks that might prevent the achievement of the defined strategic objectives, as well as the risk-mitigating actions that particularly result from the risk management system and from the effectiveness of the internal control.

This governance system is detailed in a governance manual approved by the SG Ré Board of Directors and updated annually.

SG Luxembourg is also the 100% owner of an insurance broker, SGLIB (Société Générale Life Insurance Broker).

Given the nature of its activities, the company is primarily exposed to operational risk, which is defined and monitored under the supervision of the SG Luxembourg teams.

SG Luxembourg also has a participation in Sogelife Luxembourg, a life insurance company. Sogelife's primary shareholder is Sogécap (an insurance subsidiary of SG Group) and as such primarily follows the risk management processes of Sogécap.

12. APPENDIX

12.1 PILLAR 3 CROSS REFERENCE TABLE

CRR Article	Theme	Pillar 3 report reference
435	Risk management objectives and policies	Chapter 2 and 3
436 (a) (b)	Scope of application	Chapter 3.2
436 (c)(d)(e)	Consolidation perimeter	Scope
437	Own funds	Chapter 3.3
438	Capital requirements	Chapter 3.4
439	Exposure to counterparty credit risk	Chapter 4
440	Capital buffers	Chapter 3.3
441	Indicators of global systemic importance	Not applicable as SG Luxembourg is not an G-SII
442	Credit Risk adjustments	Chapter 4
443	Unencumbered assets	Chapter 9.4
444	Use of ECAI	Not applicable as SG Luxembourg does not make use of ECAI
445	Exposure to Market Risk	Chapter 6
446	Operational Risk	Chapter 7
447	Exposures in equities not included in the trading book	Chapter 3, Chapter 4
448	Exposure to interest rate risk on positions not included in the trading book	Chapter 8
449	Exposure to securitization positions	Chapter 5
450	Remuneration policy	This is covered in the Consolidated Financial Statements
451	Leverage	Chapter 3.6
452	Use of the IRB approach to credit risk	Chapter 4
453	Use of credit risk mitigation techniques	Chapter 4
454	Use of the Advanced Measurement Approaches to operational Risk	Chapter 7
455	Use of Internal Market Risk Models	Not applicable

12.2 INDEX OF THE TEMPLATES DISCLOSED IN THE PILLAR 3

N°	Legal Reference	Title	CRR articles	Format	Chapter
1	EU LI3	Outline of the differences in the scopes of consolidation (entity by entity)	Article 436 (b)	Flexible	3.2
2	EU LI1	Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	Article 436 (b)	Flexible	3.2
3	EU OV1	Overview of RWAs	Article 438 (c)-(f)	Fixed	3.4
4	LRSum	Summary reconciliation of accounting assets and leverage ratio exposures	Article 451	Fixed	3.6
5	LRCom	Leverage ratio common disclosure	Article 451	Fixed	3.6
6	LRSpl	Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	Article 451	Fixed	3.6
7	N/A	Capital instruments' main features template	Article 437 (b)	Fixed	3.8
8	N/A	Own funds disclosure template	Article 437 (d)	Fixed	3.8
9	N/A	Amount of institution-specific countercyclical capital buffer	Article 440	Fixed	3.8
10	N/A	Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer	Article 440	Fixed	3.8
11	Internal ref.	Internal rating scale and corresponding scales of rating agencies	Article 452 (b)	Flexible	4.7
12	EU CR10	IRB (specialised lending and equities)	Article 438	Flexible	4.8
13	EU CRB-B	Total and average net amount of exposures	Article 442 (c)	Flexible	4.9
14	EU CRB-C	Geographical breakdown of exposures	Article 442 (d)	Flexible	4.9
15	EU CRB-D	Concentration of exposures by industry or counterparty types	Article 442 (e)	Flexible	4.9
16	EU CRB-E	Maturity of Exposures	Article 442 (f)	Flexible	4.9
17	EU CR1-A	Credit quality of exposures by exposure class and instrument	Article 442 (g)-(h)	Flexible	4.9
18	EU CR1-B	Credit quality of exposures by industry or counterparty types	Article 442 (g)	Flexible	4.9
19	EU CR1-C	Credit quality of exposures by geography	Article 442 (g)	Flexible	4.9
20	NPL1	Credit quality of forborne exposures	Article 442	Fixed	4.9
21	NPL3	Credit quality of performing and non-performing exposures by past due days	Article 442	Fixed	4.9
22	NPL4	Performing and non-performing exposures and related provisions	Article 442	Fixed	4.9
23	EU CR2-A	Changes in the stock of general and specific credit risk adjustments	Article 442 (i)	Fixed	4.10
24	EU CR2-B	Changes in the stock of defaulted and impaired loans and debt securities	Article 442 (i)	Fixed	4.10
25	EU CR3	CRM techniques – Overview	Article 453 (f) - (g)	Fixed	4.10
26	EU CR4	Standardised approach – Credit risk exposure and CRM effects	Article 453 (f) - (g)	Fixed	4.10
27	EU CR5	Standardised approach	Article 444 (e)	Fixed	4.10
28	EU CR6	Credit risk exposures by exposure class and PD range	Article 452 (e) - (h)	Fixed	4.10
29	EU CR8	RWA flow statements of credit risk exposures under the IRB approach	Article 438 (d)	Fixed	4.10
30	EU CCR1	Analysis of CCR exposure by approach	Article 439 (e), (f), (i)	Fixed	4.11
31	EU CCR2	CVA Capital Charge	Article 439 (e) - (f)	Fixed	4.11
32	EU CCR4	IRB approach – CCR exposures by portfolio and PD scale	Article 452 (e) - (h)	Fixed	4.11
33	EU CCR5-A	Impact of netting and collateral held on exposure values	Article 439 (e)	Fixed	4.11
34	EU CCR5-B	Composition of collateral for exposures to CCR	Article 439 (e)	Flexible	4.11
35	EU MR1	Market risk under the standardised approach	Article 445	Fixed	6.5
36	Internal ref.	Overview of RWA on operational risk	Article 438 (f)	Flexible	7.2

N°	Legal Reference	Title	CRR articles	Format	Chapter
37	Internal ref.	Ventilation on AMA Model for SG Luxembourg (at Group level)	Article 438 (f)	Flexible	7.4
38	Internal ref.	SG Luxembourg Group NPV position	Article 448	Flexible	8.2
39	Internal ref.	SG Luxembourg Group Foreign exchange position	Article 448	Flexible	8.3
40	AE1	Encumbered and unencumbered assets	Article 443	Fixed	9.4
41	AE2	Collateral received	Article 443	Fixed	9.4
42	AE3	Sources of encumbrance	Article 443	Fixed	9.4
43	Internal ref.	SG Luxembourg Group LCR and NSFR	Article 435 (1)	Flexible	9.5
44	EU LIQ1	LCR disclosure template on quantitative information	Article 435 (1)	Fixed	9.5

12.3 INDEX OF THE TEMPLATES NOT DISCLOSED IN THE PILLAR 3

Legal Reference	Title	CRR articles	Format	Comments
EU INS1	Non-deducted participations in insurance undertakings	Article 438 (c)-(d)	Fixed	SG Luxembourg is not subject to article 49 (1) from CRR
EU CR1-D	Ageing of past-due exposures	Article 442 (g)	Fixed	N/A anymore as replaced by NPE templates according to EBA/GL/2018/10
EU CR1-E	Non-performing and forborne exposures	Article 442 (g)-(i)	Fixed	N/A anymore as replaced by NPE templates according to EBA/GL/2018/10
EU CR7	IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques	Article 453 (g)	Fixed	SG Luxembourg does not have any credit derivatives.
EU CCR7	RWA flow statements of CCR exposures under the IMM	Article 438 (d)	Fixed	SG Luxembourg does not use the IMM approach.
IFRS 9-FL	Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs	Article 473a	Fixed	SG Luxembourg does not use transitional arrangements under article 473a
Own Funds 4	Transitional own funds disclosure template	Article 492 (3)	Fixed	SG Luxembourg does not apply article 79 from the CRR
N/A	Quality of forbearance	Article 442	Fixed	N/A the gross NPL ratio is less than 5%
N/A	Quality of non-performing exposures by geography	Article 442	Fixed	N/A the gross NPL ratio is less than 5%
N/A	Credit quality of loans and advances by industry	Article 442	Fixed	N/A the gross NPL ratio is less than 5%
N/A	Collateral valuation – loans and advances	Article 442	Fixed	N/A the gross NPL ratio is less than 5%
N/A	Changes in the stock of non-performing loans and advances	Article 442	Fixed	N/A the gross NPL ratio is less than 5%
N/A	Collateral obtained by taking possession and execution processes	Article 442	Fixed	SG Luxembourg does not use collateral by taking possesion and execution processes for foreborne exposures
N/A	Collateral obtained by taking possession and execution processes – vintage breakdown	Article 442	Fixed	N/A the gross NPL ratio is less than 5%

12.4 GLOSSARY

Acronym	Definition
CCF	Credit Conversion Factor
CRD	Capital Requirement Direction
CRM	Credit Risk Mitigation
CRR	Capital Requirement Regulation
CVaR	Credit Value-at-Risk
EAD	Exposure at Default
EL	Expected Loss
IMM	Internal Model Method
IRBA	Internal ratings-based approach- Advanced
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
NSFR	Net Stable Funding Ratio
PD	Probability of Default
RW	Risk Weighted
RWA	Risk Weighted Assets
SFT	Securities Financing Transactions
SG	Société Générale Head Office
SG Group	Société Générale Head Office and all its subsidiaries
SG Luxembourg	Societe Generale Luxembourg without its subsidiaries
SG Luxembourg Group	Societe Generale Luxembourg with its subsidiaries
VaR	Value-at-Risk

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