RISK REPORT

2021

PILLAR 3 2020

SOCIETE GENERALE

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ABBREVIATIONS USED

Millions of euros: EUR m / **Billions of euros:** EUR bn / **FTE :** Headcount in Full-Time Equivalents
Rankings: the source for all references to rankings is given explicitly. Where it is not, rankings are based on internal sources.

1

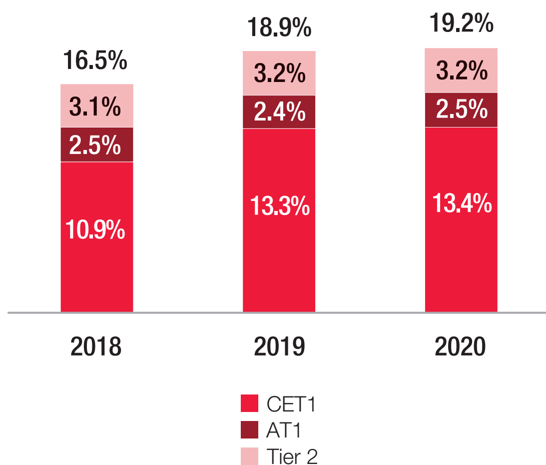
GROUP CONCISE RISK STATEMENT

As part of setting its Risk Appetite, Societe Generale seeks a sustainable development based on a diversified and balanced banking model with a strong European foothold and a global presence targeted on a few areas of strong business expertise. The Group also aims to maintain long-term relationships with its customers built on well-earned trust, and to respond responsibly to the expectations of all of its stakeholders.

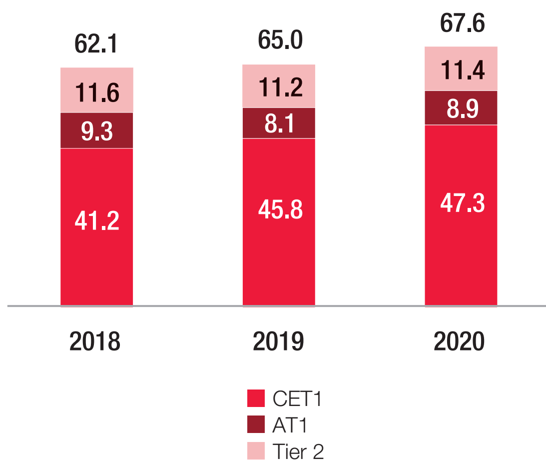
1.1 FINANCIAL STRENGTH PROFILE

The Group aims to maintain a robust financial strength profile, consistent with its financial rating target. In terms of financial ratios[1], the Group calibrates its objectives to ensure a sufficient safety margin in relation to regulatory requirements. As at 31 December 2020, the Group's CET1 ratio stood at 13.4% against 13.3% at the end of 2019, well above the regulatory requirement of 9.02% (“MDA” threshold - Maximum Distributable Amount, calculated on 1 January 2021).

SOLVENCY RATIOS

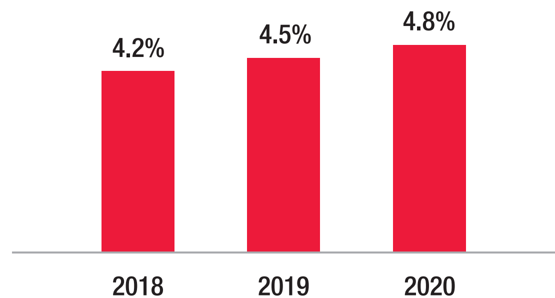


REGULATORY CAPITAL (IN EURBN)



As at 31 December 2020, the Group’s leverage ratio stood at 4.8%, taking into account an amount of Tier 1 capital of EUR 56.2 billion compared with a leverage exposure of EUR 1,179 billion (4.5% at 31 December 2019, with EUR 53.9 billion and EUR 1,200 billion respectively).

LEVERAGE RATIO

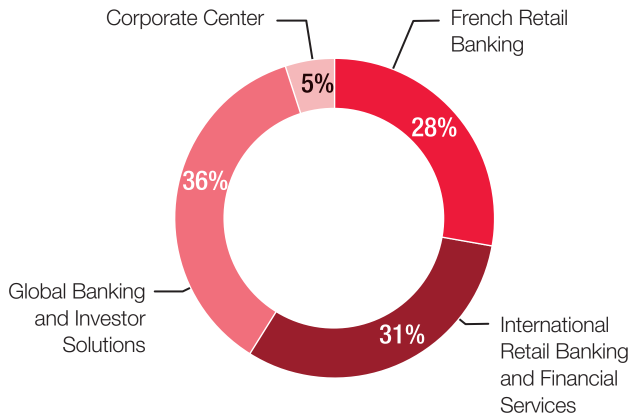


In addition, at 31 December 2020, the Group has a TLAC (Total Loss Absorbing Capacity) ratio of 28.6% of weighted exposures (for a regulatory requirement of 19.5%) and 9.2% of leverage exposure (for a regulatory requirement of 6%).

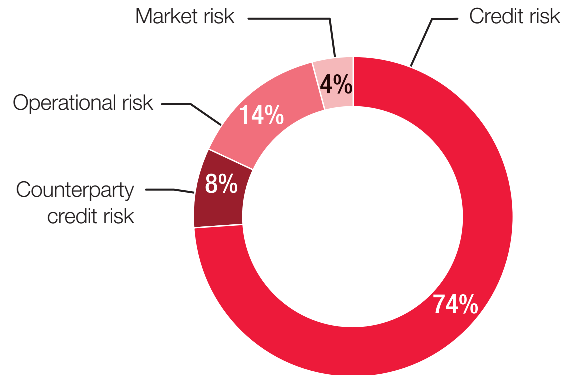
Regarding its risk profile, the Group presents a balanced distribution of weighted exposures between its Corporate Banking and Investor Solutions division (36% as at 31 December 2020), International Retail Banking and Financial Services (31% as at 31 December 2020) and French Retail banking (28% as at 31 December 2020). In terms of evolution, the Group’s risk-weighted exposures stood at EUR 352 billion at 31 December 2020 compared to EUR 345 billion at 31 December 2019, an increase of + 2% mainly driven by the Corporate Banking and Investor Solutions division.

(1) The solvency and leverage prudential ratios, as well as the amounts of regulatory capital and RWA featured here, take into account: - at 31 December 2020, the IFRS 9 phasing (fully-loaded CET1 ratio of 13.2%, the phasing effect being +28 bps); - at 31 December 2019, the restatement for the 2019 dividend cancellation, in accordance with restrictions on dividend payments imposed by the European authorities.

DISTRIBUTION OF RWA BY CORE BUSINESS (RWA AT END 2020: EUR 352BN *VS.* RWA AT END 2019: EUR 345BN)



DISTRIBUTION OF RWA BY RISK TYPE (RWA AT END 2020: EUR 352BN *VS.* RWA AT END 2019: EUR 345BN)



1.2 CREDIT RISK AND COUNTERPARTY CREDIT RISK

The risk-weighted exposures for credit risk and counterparty credit risk represent the main risk of the Group with an amount of risk-weighted exposures (RWA) of EUR 287.3 billion at 31 December 2020, or 82% of total RWAs. These risk-weighted exposures increased by 2% compared to 31 December 2019 and are mainly based on the internal model approach (83% of RWA credit and counterparty credit risks). This increase is mainly explained by a model effect (mainly linked to the review of internal models - TRIM) and a decline in the quality of assets, and is partially offset by a contraction of the prudential scope (following the sale of Société Générale de Banque aux Antilles and SG Finans) as well as a negative currency effect (due in particular to the depreciation of US dollar and Russian ruble against the euro).

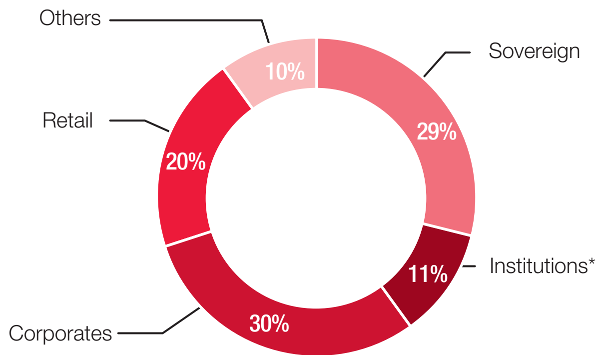
The credit portfolio has a diversified profile. At 31 December 2020, exposure to credit and counterparty credit risks represented an EAD amount of EUR 1,004 billion, up (+9.3%) compared with the end of 2019, driven in particular by the increase in "Sovereign" exposures (especially to French sovereign). The distribution of the portfolio between main customer categories is balanced: Corporates (30%), Sovereigns (29%), Retail (20%), Institutions (11%) and Others (10%).

In terms of geographic breakdown of the portfolio, exposure to emerging countries remains limited: the Group's exposure is 69% to Western Europe (including 47% to France) and 12% towards the United States. In sectoral terms, only three business sectors (financial activities, business services and real estate activities) represent more than 10% of the Group's Corporate exposures.

Regarding counterparty credit risk in particular, the exposure represents an EAD amount of EUR 126 billion, up (+4.3%) compared to the end of 2019, linked to the significant increase in Corporate exposures, partially offset by a decrease in Institution exposures.

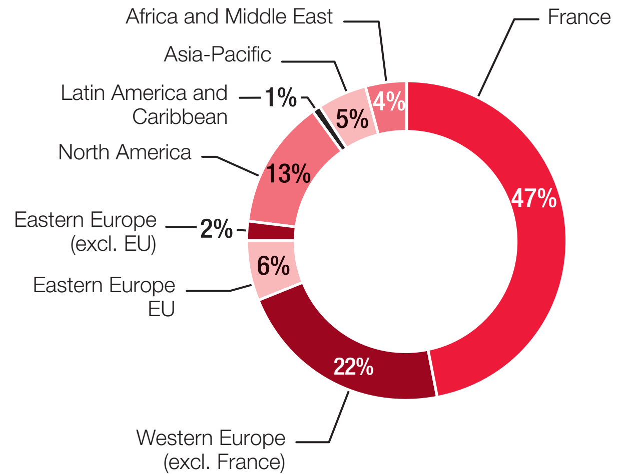
(See details in Chapter 6 "Credit risk" and Chapter 7 "Counterparty credit risk".)

GROUP RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31 DECEMBER 2020 ON- AND OFF-BALANCE SHEET EXPOSURES (EUR 1,004BN IN EAD)



** Institutions: Basel classification bank and public sector portfolios.*

GEOGRAPHIC BREAKDOWN OF GROUP RISK EXPOSURE AT 31 DECEMBER 2020 (ALL CLIENT TYPES INCLUDED): EUR 1,004BN



Regarding the Group's net risk charge, in 2020 it amounted to EUR -3.3 billion, up +159% compared with 2019. This change is driven by the increase in outstanding amounts in Stage 2 due to the deterioration in the economic outlook and, to a lesser extent, by the increase in Stage 3 outstanding amounts due to defaults that occurred mainly in the first half of the year.

Expressed in basis points, the cost of risk thus stands at 64 basis points for the year 2020 against 25 basis points in 2019.

The gross doubtful outstanding amounts coverage rate decreased significantly to 52% as at 31 December 2020 (compared with 56% as at 31 December 2019), mainly due to the sale of portfolios of non-performing loans that were heavily provisioned, and the entry into default of a few cases of Corporates of high unit value, weakly covered.

(See details in section 6 of Chapter 6 "Credit risk".)

TABLE 1: PROVISIONING OF DOUBTFUL LOANS

(In EURbn)	31.12.2020	31.12.2019
Group gross doubtful loans ratio[(1)]	3.3%	3.1%
Doubtful loans (Stage 3)	17.0	16.1
Stage 3 Provisions	8.8	9.0
Group gross doubtful loans coverage ratio	52%	56%

(1) Customer loans and advances, deposits at banks and loans due from banks, finance leases, excluding loans and advances classified as held for sale, cash balances at central banks and other demand deposits, in accordance with the EBA/ITS/2019/02 Implementing Technical Standards amending Commission Implementing Regulation (EU) No 680/2014 with regard to the reporting of financial information (FINREP).

TABLE 2: COST OF RISK

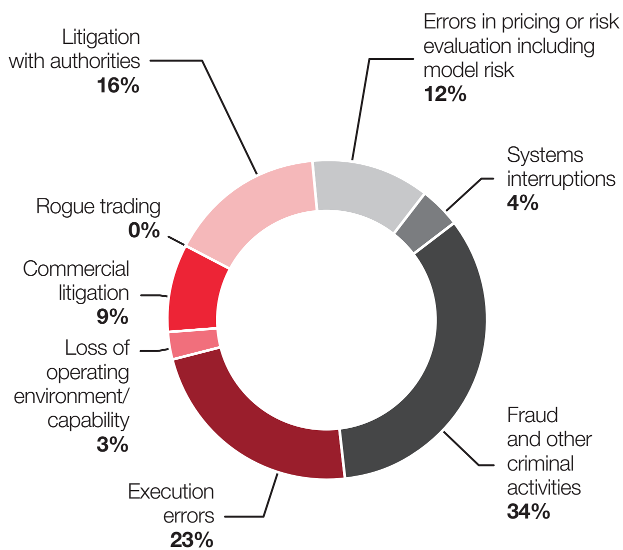
(In bps)	31.12.2020	31.12.2019
Cost of risk	64	25

1.3 OPERATIONAL RISK

At 31 December 2020, risk-weighted operational risk exposures represented EUR 49.2 billion, or 14% of the Group's RWAs, and increased slightly (+2.6%) compared to the end of 2019 (EUR 48.0 billion). These weighted exposures are mainly determined using an internal model (95% of the total) and their variation is mainly explained by the application of regulatory changes.

(See details in section 4 of Chapter 10 “Operational risk”.)

OPERATIONAL RISK LOSSES: BREAKDOWN BY SOCIETE GENERALE RISK EVENT TYPE - AMOUNTS (PERIOD 2016-2020)



1.4 MARKET RISK

Market risk-weighted exposures are determined primarily through internal models (89% of the total at the end of 2020). These risk-weighted exposures amounted to EUR 15.3 billion at the end of 2020, or 4% of the Group's total RWAs, up (+5.7%) compared with the end of 2019 (EUR 14.5 billion).

The annual increase in capital requirements for market risk is explained in particular by a diffuse and moderate increase in VaR, which at the end of the year almost returned to its level prior to the financial crisis triggered by the Covid-19 pandemic (after having significantly increased at the end of the first quarter and in the second quarter, mainly in the interest rate and credit scopes, the equities scope – and in particular the exotic products activities – presenting the main factor of volatility), IRC (increasing due in particular to debt instruments on several categories of issuers) and RWAs calculated using the standardised approach, as a consequence of new securitisation positions and an increase in the rate component.

(See details in Chapter 9 “Market risk”.)

DISTRIBUTION OF MARKET RISK RWA BY RISK FACTOR AT 31.12.2020
MARKET RISK RWA AT 31.12.2020: EUR 15.3BN *VS.* EUR 14.5BN AT 31.12.2019

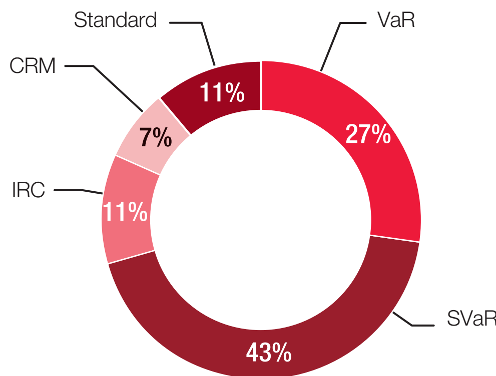


TABLE 3: MARKET RISK - VAR AND SVAR

(In EURm)	2020	2019
VaR (1 day, 99%) average value	33	23
SVaR (1 day, 99%) average value	50	38

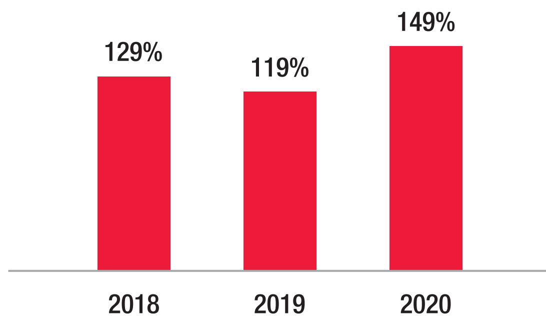
1.5 LIQUIDITY RISK

The Liquidity Coverage Ratio (LCR) stood at 149% at the end of 2020 (compared with 119% at the end of 2019). The variation can be explained by a significant increase in high-quality liquid assets (HQLA).

Liquidity reserves amounted to EUR 243 billion as at 31 December 2020 (compared with EUR 190 billion as at 31 December 2019).

(See details in sections 5 and 6 of Chapter 12 “Liquidity risk”.)

LCR RATIO



1.6 STRUCTURAL RISKS

The sensitivity of the Group's value to an interest rate change of +10 bps was EUR +345 million as at 31 December 2020 (compared with EUR -54 million as at 31 December 2019). The sensitivity of the Group's net interest margin over the next three years remains low. In the event of a parallel rise in the yield curve of +10 bps, it is positive and represents less than 2% of net banking income.

TABLE 4: SENSITIVITY OF THE GROUP’S VALUE TO A +10 BPS INTEREST RATE VARIATION

(In EURm)	**Total**
Amount of sensitivity (31.12.2020)	345
Amount of sensitivity (31.12.2019)	(54)

(See details in section 2 of Chapter 11 “Structural interest rate and exchange rate risks”.)

1.7 SIGNIFICANT OPERATIONS IN 2020

The Group’s strategy is to concentrate its presence on markets where it enjoys leading positions with critical mass. In accordance with this strategy of refocusing and reallocating its RWAs, it finalised the sale of its subsidiaries Société Générale de Banque aux Antilles (SGBA) and SG Finans AS. These two disposals reduced the Group’s total balance sheet by EUR 4.4 billion.

2

RISK FACTORS

IN BRIEF

This section describes the various types of risks and the risks to which Societe Generale is exposed.

2.1 TYPES OF RISKS

The Group's risk management framework involves the following main categories:

- **credit risk:** risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. This risk includes the risk linked to market transactions and securitisation activities and may be further amplified by individual, country and sector concentration risk;
- **counterparty credit risk:** Credit risk of a counterparty on a market transaction, combined with the risk of changes in exposure;
- **market risk:** 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, the price of securities (equity, bonds), commodities, derivatives and other assets;
- **operational risk:** risk of losses resulting from inadequacies or failures in processes, personnel or information systems, or from external events. It includes:
  - **non-compliance risk:** risk of court-ordered, administrative or disciplinary sanctions, financial loss or reputational damage due to failure to comply with legal and regulatory requirements or professional/ethical standards and practices applicable to banking,
  - **reputational risk:** risk arising from a negative perception on the part of customers, counterparties, shareholders, investors or regulators that could negatively impact the Group's ability to maintain or engage in business relationships and to sustain access to sources of financing,
  - **misconduct risk:** risk resulting from actions (or inactions) or behaviour of the Bank or its employees inconsistent with the Group's Code of Conduct, which may lead to adverse consequences for our stakeholders, or place the Bank's sustainability or reputation at risk,
  - **IT and Information Systems Security risk** (cybercrime, IT systems failures, etc.);
- **structural risk:** risk of losses in interest margin or banking book value if interest rates, exchange rates, or credit spreads change. This risk is related to the Bank's commercial and proprietary activities, it includes the distortion of the structural difference between assets and liabilities related to pension obligations, as well as the risk related to longer terms of future payments;
- **liquidity and funding risk:** liquidity risk is defined as the inability of the Group to meet its financial obligations: debt repayments, collateral supply, etc. Funding risk is defined as the risk that the Group will not be able to finance its business growth on a scale consistent with its commercial objectives and at a cost that is competitive compared to its competitors;
- **model risk:** Risk of losses due to decisions reached based on results of internal modelling due to errors in development, implementation or use of these models;
- **risk related to insurance activities:** through its insurance subsidiaries, the Group is also exposed to a variety of risks linked to this business. In addition to balance sheet management risks (interest rate, valuation, counterparty and exchange rate risk), these risks include premium pricing risk, mortality risk and the risk of an increase in claims;
- **strategic/business risk:** risks resulting from the Group's inability to execute its strategy and to implement its business plan for reasons that are not attributable to the other risks in this list; for instance, the non-occurrence of the macroeconomic scenarios that were used to construct the business plan or sales performance that was below expectations;
- **private equity risk:** risk of reduction in the value of our equity ownership interests;
- **residual value risk:** through its specialised financing activities, mainly in its long-term vehicle leasing subsidiary, the Group is exposed to residual value risk (where the net resale value of an asset at the end of the leasing contract is less than expected).

In addition, **risks associated with climate change**, both physical (increase in the frequency of extreme climatic events) and transition-related (New Carbon Regulation), have been identified as factors that could aggravate the Group's existing risks.

2.2 RISK FACTORS

This section identifies the main risk factors that the Group estimates could have a significant effect on its business, profitability, solvency or access to financing.

The risks inherent to the Group's activity are presented below under six main categories, in accordance with Article 16 of the "Prospectus 3" Regulation 2017/1129 of 14 June 2017 applicable to risk factors since 21 July 2019:

- risks related to the macroeconomic, market and regulatory environments;
- credit and counterparty credit risks;
- market and structural risks;
- operational risks (including risk of inappropriate conduct) and model risks;
- liquidity and funding risks;
- risks related to insurance activities.

Risk factors are presented on the basis of an evaluation of their materiality, with the most material risks indicated first within each category. The risk exposure or measurement figures included in the risk factors provide information on the Group's exposure level but are not necessarily representative of future evolution.

2.2.1 RISKS RELATED TO THE MACROECONOMIC, MARKET AND REGULATORY ENVIRONMENTS

2.2.1.1 The coronavirus pandemic (Covid-19) and its economic consequences could adversely affect the Group's business, operations and financial position.

In December 2019, a new strain of coronavirus (Covid-19) emerged in China. The virus has since spread to numerous countries around the world and the World Health Organisation declared the outbreak of a pandemic in March 2020.

The propagation of the virus and the health measures taken in response to it (border closures, lockdown measures, restrictions on certain economic activities, etc.) have and may continue to have a significant impact, both direct and indirect, on the global economic situation and financial markets. The persistence of the Covid-19 pandemic and the emergence of new variants have led to new restrictive measures on mobility (introduction of new lockdown measures and local or national curfews), notably in France, while the economic rebound seen in the summer of 2020 is losing momentum in several countries. An ever-active virus could lead to the extension or repetition of restrictive measures for several months, and thus adversely affect the Group's business, financial position and results. The deployment of vaccination programmes is encouraging, but risks remain regarding the overall effectiveness of these programmes. Logistical difficulties, delays in vaccine production, or doubts over their effectiveness (notably with regard to new variants) could prolong uncertainties and negatively affect economic activity and financial markets.

The sharp recession experienced by the affected countries and the reduced world trade will continue to have a negative impact on the global economic environment as long as global production, investments, supply chains and consumer demand are affected, thereby impacting the Group's business and that of its customers and counterparties.

The different restrictive measures also led to a decline in the Group's commercial activity and results due to the reduced opening of its retail network and lower demand from its customers. New phases of lockdown measures or curfews in the countries where the Group operates may have an even greater impact on the Group's financial results.

In many jurisdictions in which the Group operates, national governments and central banks have taken or announced exceptional measures to support the economy and its actors (government-guaranteed loan facilities programmes, tax deferrals, facilitated recourse to part-time working, compensation, etc.) or to improve liquidity in financial markets (asset purchases, etc.). The agreement reached on 21 July 2020 by the European Commission to provide the European Union with a EUR 750 billion recovery mechanism and the announcement by the French President of a new EUR 100 billion national recovery plan should encourage a more demand-driven recovery. Although the initial support measures adequately addressed the immediate effects of the crisis, the measures that are currently being implemented may not be sufficient to support the recovery. As these plans unfold, the ECB's ability to conduct its quantitative easing policy will remain crucial for ensuring financial stability in the eurozone.

As part of the French government-guaranteed loan (*Prêts garantis par l'État*) programme for a maximum amount of EUR 300 billion, the Group has adapted its loan approval processes to handle the massive flow of applications. The Group has taken exceptional measures to financially support its customers and help them address the effects of the Covid-19 pandemic on their activities and income. The Group also supports its clients abroad within the framework of public or private moratoria or government-guaranteed loans. These measures require the Group to reallocate resources and to adapt its granting and management processes. In the event that these support measures for both businesses and individuals were to be further strengthened (extension of moratoria, additional financing, strengthening of equity capital, etc.), the Group's business and results may continue to be affected.

The restrictive measures taken in several of the main countries where the Group operates (with Western Europe representing 69% of the Group's EAD (Exposure at Default) at 31 December 2020, of which 47% was in France) are significantly reducing economic activity and are leading many countries to face economic recessions. The risk of new lockdown periods (especially in the event of new pandemic waves) as well as a slow recovery of demand could increase the scale and duration of these recessions. This, combined with a high level of public and corporate indebtedness, could constitute a brake on the recovery and lead to significant adverse repercussions on the quality of the Group's counterparties and the level of non-performing loans for both businesses and individuals.

Within the Corporate portfolio, the most impacted sectors to date have been the automotive sector (0.9% of the Group's total exposure as at 31 December 2020), hotels, catering and leisure (0.6% of the Group's total exposure), non-food retail distribution (the entirety of the retail distribution sector representing 1.6% of the Group's total exposure), air transport and aeronautics (less than 0.5% of the Group's total exposure) and maritime transport (less than 1% of the Group's total exposure). The oil and gas sector has been strongly impacted by a drop in demand due to the pandemic and by the initially uncoordinated actions on supply from several producing countries, including Opec countries and Russia, resulting in a sharp drop in the price per barrel and increased price volatility. Within the Corporate portfolio, this sector represented approximately 1.9% of the Group's total exposure at 31 December 2020.

This context led to a significant increase in the Group's cost of risk in 2020. This increase takes into account the adjustment in our outlook in accordance with IFRS 9 principles and expert analyses resulting in complementary overlays. The Group's cost of risk could be affected by its participation in the French government-guaranteed loan programmes (in respect of the unguaranteed residual exposure) and by the implementation in various jurisdictions of moratoria periods delaying the recognition of defaults. The cost of risk in 2020 reached a higher level than in previous years.

For information purposes, the cost of risk was 54 basis points for the fourth quarter of 2020 and 64 basis points over the full year 2020. At 31 December 2020, the non-performing loan ratio stood at 3.3%.

Due to the Covid-19 pandemic, the Group's results and financial position were affected by unfavourable developments in global financial markets, especially in March and April 2020 (extreme volatility and dislocation of term structure, alternate sharp declines and rapid rebounds in the equity markets, widening of credit spreads, unprecedented declines in dividend distributions, etc.). These exceptional conditions have particularly affected the management of structured financial instruments whose underlyings are equity products. These activities have since been adapted, and are continuously being adapted, in order to improve their risk profiles.

The situation in financial markets improved in the second half of 2020 as a result of recovery plans announced by governments, accommodating central bank policies and the decline in political instability in the US following the election of the democrat Joe Biden. However, the new epidemic wave and the related uncertainties, despite the progressive deployment of vaccine programmes, may result in a further adverse impact on the Group's capital markets activities, including decline in activity, higher hedging costs, trading losses, increase in market risk reserves, reduction in liquidity on certain markets, operational losses related to capital markets activities, etc.

For information purposes, risk-weighted assets (RWA) related to market risks were thus up 6% at the end of 2020 compared to the situation at the end of December 2019, to EUR 15.3 billion. The Global Markets and Investor Services sector, which mainly concentrates the Group's market risks, represented a net banking income of EUR 4.2 billion, or 19% of the Group's total revenues, over the full year 2020.

Restrictive measures have led the Group to massively implement remote working arrangements, particularly in a significant part of its market activities. This organisation, which was deployed in immediate response to the crisis, increases the risk of operational incidents and the risk of cyber-attacks faced by the Group. In addition, all employees remain subject to health risks at the individual level. Prolonged remote working also increases psychosocial risk, with potential impacts in terms of organisation and business continuity in the event of prolonged absence of such individuals.

The unprecedented environment resulting from the Covid-19 pandemic could alter the performance of the models used within the Group (particularly in terms of asset valuation and assessment of own funds requirements for credit risk), due in particular to calibration carried out over periods that are not comparable to the current crisis or to assumptions that are no longer plausible, leading the models beyond their area of validity. The temporary decline in performance and the recalibration of these models could have an adverse impact on the Group's results.

The Group's dividend distribution policy could be influenced in 2021 by the recommendations made by the ECB to banks under its supervision in light of the Covid-19 pandemic and their consequences on the economic and financial situation.

Uncertainty as to the duration and impact of the Covid-19 pandemic makes it difficult to predict its impact on the global economy. The consequences for the Group will depend on the duration of the pandemic, the measures taken by national governments and central banks and developments in the health, economic, financial and social context.

2.2.1.2 The global economic and financial context, as well as the context of the markets in which the Group operates, may adversely affect the Group's activities, financial position and results of operations.

As a global financial institution, the Group's activities are sensitive to changes in financial markets and economic conditions generally in Europe, the United States and elsewhere around the world. The Group generates 44% of its business in France (in terms of 2020 net banking income), 35% in Europe (excluding France), 7% in the Americas and 14% in the rest of the world. The Group could face a significant deterioration in market and economic conditions resulting from, in particular, crises affecting capital or credit markets, liquidity constraints, regional or global recessions, sharp fluctuations in commodity prices (notably oil), currency exchange rates or interest rates, inflation or deflation, rating downgrades, restructuring or defaults of sovereign or private debt, or adverse geopolitical events (including acts of terrorism and military conflicts). Such events, which can develop quickly and thus potentially may not be anticipated and hedged, could affect the Group's operating environment for short or extended periods and have a material adverse effect on its financial position, cost of risk and results of operations.

The situation related to the Covid-19 crisis is an aggravating factor in these risks and represents the main source of uncertainty. It is detailed in the risk factor 2.2.1.1 "The coronavirus (Covid-19) pandemic and its economic consequences could adversely affect the Group's business and financial performance".

In recent years, the financial markets have thus experienced significant disruptions resulting notably from concern over the trajectory of the sovereign debt of several eurozone countries, the Brexit situation (refer to the risk factor 2.2.1.5 "Brexit and its impact on the financial markets and the economic environment could have repercussions on the Group's activity and results of operations."), the persistence of commercial and political tensions (especially between the United States and China) or fears of a major slowdown growth in China. The crisis related to the Covid-19 pandemic is unprecedented in nature and its potential effects on the financial markets are not yet fully understood. These factors are likely to weaken several economic sectors and consequently the credit quality of the actors concerned, which could negatively affect the Group's activities and results. Geopolitical risks also remain high and the accumulation of different risks is an additional source of instability, which could also weigh on economic activity and demand for credit, while increasing the volatility of financial markets.

The long period of low interest rates in the eurozone and the United States, driven by accommodating monetary policies, has affected, and could continue to affect, the Group's net interest margin (which stood at EUR 3.9 billion in 2020 for Retail Banking in France). The growth in the volume of loans made to non-financial companies, already high before the pandemic, significantly increased in 2020 with the implementation of government-guaranteed loan programmes (such as the *Prêts garantis par l'État* programme in France). If the economic recovery is too slow, it may provoke a rise in the volume of non-performing loans and create a weak investment dynamic in a context where companies' balance sheets are already fragile. The environment of low interest rates tends to lead to an increased risk appetite of some participants in the banking and financial system, lower risk premiums compared to their historical average and high valuation levels of certain assets. These favourable market conditions could change in the context of a gradual phase-out of highly expansionary central bank policies. The financial markets' long-term expectations for inflation are still very low, but relative price changes are likely and the risk of inflationary pressures in the medium term cannot be excluded.

Furthermore, the environment of abundant liquidity that has been at the origin of the upturn in credit growth in the eurozone and particularly in France, amplified by the implementation of the French government-guaranteed loan programme, could lead in the future to additional regulatory measures by supervisory authorities in order to limit the extension of credit or to further protect banks against a financial cycle downturn. In addition, the ongoing presence of geopolitical or political risks is another source of uncertainty which, if tensions are escalated, could impact global economic activity and credit demand, while increasing the volatility of financial markets.

The Group's results are significantly exposed to economic, financial and political conditions in the principal markets in which it operates.

At 31 December 2020, Group's exposures at default (EAD) to credit and counterparty credit risks were concentrated in Europe and the United States (together accounting for 90%), with a predominant exposure to France (47% of EAD). The other exposures concern Western Europe excluding France (accounting for 22%), North America (accounting for 13%), Eastern European members of the European Union (accounting for 6%) and Eastern Europe excluding the European Union (accounting for 2%).

In France, the Group's principal market, the good growth performance during the 2016-2019 period and low interest rates have fostered an upturn in the housing market. A reversal of activity in this area could have a material adverse effect on the Group's asset value and business, by decreasing demand for loans and resulting in higher rates of non-performing loans.

The Group also operates in emerging markets, such as Russia (2% of the Group's exposure to credit and counterparty credit risk at 31 December 2020) and Africa and the Middle East (4% of the Group's credit exposure). A significant adverse change in the macroeconomic, health, political or financial environment in these markets could have a material adverse effect on the Group's business, results and financial position. These markets may be adversely affected by uncertainty factors and specific risks, such as the significant decline in oil prices since the Covid-19 pandemic, which, if it were to last beyond several quarters, would deteriorate the financial health of producing countries. The correction of macroeconomic or budgetary imbalances that would result could be imposed by the markets with an impact on growth and on exchange rates. Another source of uncertainty comes from the enforcement of international sanctions against certain countries such as Russia. In the longer term, the energy transition to a "low-carbon economy" could adversely affect fossil energy producers, energy-intensive sectors of activity and the countries that depend on them. In addition, capital markets (including foreign exchange activity) and securities trading activities in emerging markets may be more volatile than those in developed markets and may also be vulnerable to certain specific risks, such as political instability and currency volatility. These elements could negatively impact the Group's activity and results of operations.

2.2.1.3 The Group's failure to achieve its strategic plan and financial objectives disclosed to the market could have an adverse effect on its business, results of operations and value of its financial instruments.

At the time of the publication of its annual results on 11 February 2021, the Group communicated new guidance on operating expenses, cost of risk and the solvency of the Group. The Group aims by 2023 to reduce its underlying costs compared to 2020. The Group has launched several initiatives expected to produce results starting from 2022, with a cost reduction target of approximately EUR 450 million in market activities as early as 2022-2023, a cost reduction target of approximately EUR 450 million in retail banking in France in 2025 compared to 2019 (of which approximatively 80% is expected by 2024) and other cost reductions through the finalisation of remediation actions and by standardising and digitalising certain processes. The Group expects a lower cost of risk in 2021 compared to 2020. The Group is aiming to achieve a 2021 CET1 ratio above target, at a value of more than 200 basis points above the Maximum Distributable Amount (MDA) at all times, including in a Basel IV environment. These expectations are based on a number of assumptions related to the health and macroeconomic context. A deterioration in the health situation could have an impact on the global macroeconomic situation, which may compromise the achievement of Group's objectives and negatively affect the Group's profitability. It should be noted that the Group regularly reports on its financial aggregates as part of its financial communication.

More precisely, the *Vision 2025* project anticipate the merger between the Retail Banking network of Societe Generale in France and Crédit du Nord. Although this project has been designed to enable a controlled deployment, the merger could have a short-term material adverse effect on the Group's business, financial position and costs. System reconciliations could face unanticipated delays, delaying part of the expected merger benefits. The project could lead to the departure of a number of employees, requiring replacements and efforts related to new employee training, thus potentially generating additional costs. The merger could also lead to the departure of a portion of the Group's customers, resulting in loss of revenue. The legal and regulatory aspects of the transaction could result in delays or additional costs.

Furthermore, the Group is committed to becoming a leading bank in the field of responsible finance through, among others:

- a new commitment to raise EUR 120 billion for energy transition between 2019 and 2023 (including EUR 100 billion in sustainable bond issues and EUR 20 billion earmarked for the renewable energy sector in the form of advisory and financing);
- a planned total exit from thermal coal;
- the signing as co-founder of the Principles for a Responsible Banking Sector, through which the Group undertakes to strategically align its business with the Sustainable Development Objectives set by the United Nations and the Paris Agreement on Climate Change.

These actions (or similar actions that may be taken in the future) could in some cases decrease the Group's results in the sectors concerned.

2.2.1.4 The Group is subject to an extensive supervisory and regulatory framework in each of the countries in which it operates and changes in this regulatory framework could have a negative effect on the Group's businesses, financial position, costs, as well as on the financial and economic environment in which it operates.

The Group applies the regulations of the jurisdictions in which it operates. French, European and U.S. regulations as well as other local regulations are concerned, given the cross-border activities of the Group. The application of existing regulations and the implementation of future regulations requires significant resources that could affect the Group's performance. In addition, non-compliance with regulations could lead to fines, damage to the Group's reputation, forced suspension of its operations or the withdrawal of operating licences. By way of illustration, exposures to credit and counterparty credit risks (EAD) in France, the 27-member European Union (including France) and the United States represented 47%, 67% and 12%, respectively, at 31 December 2020.

Among the recent regulations that have a significant influence on the Group:

- following the 2008 financial crisis, the legal and regulatory framework for activities on the financial markets (such as the European regulations and directives EMIR, MiFID 2 and MiFIR or the Volcker Regulation in the United States) have increased the Group's obligations, notably in the areas of transparency and reporting, and have also implemented an obligation to offset some of its derivative transactions or to increase related collateral requirements. In the next two years, certain factors are still likely to degrade the environment for market activities: (i) the possible strengthening of transparency constraints and investor protection measures (review of MiFID II/MiFIR), (ii) the implementation of the fully phased-in Basel III Package (including the fundamental review of the trading book, FRTB), which may unilaterally increase requirements applicable to European banks and (iii) a potential forced relocation of clearing activities related to euro-denominated rate derivatives, which could affect the competitiveness of European actors;
- in the United States, the implementation of the Dodd-Frank Act has been almost finalised. The new Securities and Exchange Commission (SEC) regulations related to security-based swap dealers will be applicable in 2021 and will constitute a significant step for the Group's U.S. market activities;
- new European measures aimed at restoring banks' balance sheets, especially through active management of non-performing loans (NPLs), which are leading to a rise of prudential requirements and an adaptation of the Group's strategy for managing NPLs. More generally, additional measures to define a framework of good practices for granting (*e.g.*, loan origination orientations published by the European Banking Authority) and monitoring loans could also impact the Group;
- the strengthening of the supervisor's requirements (through the adoption of best practices) within the Single Supervisory Mechanism (SSM) could have an impact on the management costs and risk-weighted exposure levels of internal models;
- a strengthening of requirements related to internal control as well as the Group's rules of governance and good conduct, with a potential impact on costs;
- the strengthening of data quality and protection requirements and a potential strengthening of cyber-resilience requirements in relation to the consultation on "digital operational resilience framework for financial services" initiated by the European Commission in December 2019;
- the implementation of the European sustainable finance regulatory framework, with an increase in non-financial reporting obligations, enhanced inclusion of environmental and social issues in risk management activities and the potential inclusion of such risks in the supervisory review and assessment process (Supervisory Review and Evaluation Process - SREP);
- the strengthening of the crisis prevention and resolution regime set out in the Bank Recovery and Resolution Directive of 15 May 2014 (BRRD), as revised, gives the Single Resolution Board (SRB) the power to initiate a resolution procedure when the point of non-viability is reached. In this context, the SRB could, in order to limit the cost to the taxpayer, force creditors and shareholders of the Group to incur losses in priority. Should the resolution mechanism be triggered, the Group could, in particular, be forced to sell certain of its activities, modify the terms and conditions of the remuneration of its debt instruments, issue new debt instruments, or be subjected to the depreciation of its debt instruments or their conversion into equity securities. Furthermore, the Group's contribution to the annual financing of the Single Resolution Fund (SRF) is significant and will grow steadily until 2023, with 2024 being the year of the full endowment of the fund. The contribution to the banking resolution mechanisms is described in Note 7.3.2 *Other provisions for risks and expenses* of the 2021 Universal Registration Document.

Future legal and regulatory obligations could also be imposed on the Group, such as:

- the ongoing implementation in France of consumer-oriented measures affecting retail banking (limitation of banks' fees for individuals and extension of such measures to small and medium-sized businesses, protection measures for vulnerable customers, extended liability of customer advisers on societal issues (equality between men and women, advice on energy transition, etc.));
- the potential requirement (at the European level) to open more bank accounts (savings books, investments) to third-party service providers and/or to pool customer data.

The Group is also subject to complex tax rules in the countries in which it operates. Changes in applicable tax rules, uncertainty regarding the interpretation of such changes or their impact may have a negative impact on the Group's business, financial position and costs.

Moreover, as an international bank that handles transactions with US persons, denominated in US dollars, or involving US financial institutions, the Group is subject to US laws and regulations relating in particular to compliance with economic sanctions, the fight against corruption and market abuse. More generally, in the context of agreements with US and French authorities, the Group has undertaken to implement, through a dedicated programme and organisation, corrective actions to address identified deficiencies, the cost of which will be significant, and strengthen its compliance programme. In the event of a failure to comply with relevant US laws and regulations, or a breach of the Group's commitments under these agreements, the Group could be exposed to the risk of (i) administrative sanctions, including fines, suspension of access to US markets, and even withdrawals of banking licences, (ii) criminal proceedings, and (iii) damage to its reputation.

2.2.1.5 Brexit and its impact on financial markets and the economic environment could have an adverse effect on the Group's activities and results of operations.

The British law on the withdrawal of the United Kingdom from the European Union came into force on 1 February 2020, confirming the United Kingdom's departure from the European Union.

Shortly before the end of the transition period ended on 31 December 2020, the EU and the United Kingdom concluded the EU-UK Trade and Cooperation Agreement (TCA) on 24 December 2020. The TCA was approved by the British parliament and was transposed into UK law by the European Union (Future Relationship) Act 2020 and remains subject to ratification by the European Parliament. Even if the TCA avoided a “no deal” Brexit at the end of the transition period, certain aspects of the future relationship between the EU and the United Kingdom remain uncertain and the Group has had to adapt its economic model. The TCA does not replicate the market access that the UK had as a member of the EU’s single market and customs union, and the Group will now have to rely on the replacement of the passport regime with the EU’s existing general access regime for foreign banks, which relies heavily on granting market access through a series of equivalency determinations. It is still unclear when or if the European Commission will make further equivalence decisions. The Group will continue to face trade barriers between the UK and the EU, including compliance with two regulatory regimes and the need to respect local rules governing the provision of services.

At the end of the transition period, the Group did not experience major disruptions related to market, counterparty or credit risks. Also, there was no significant increase in volumes over the year-end period, and IT systems functioned normally. At 31 December 2020, the Group had an Exposure at Default of EUR 50 billion in the United Kingdom (5% of the Group’s credit exposure). Despite the trade agreement, Brexit could lead to further disruption of the European and global economies and financial markets and thus have an impact on the Group’s activities and results.

2.2.1.6 Increased competition from banking and non-banking operators could have an adverse effect on the Group’s business and results, both in its French domestic market and internationally.

Due to its international activity, the Group faces intense competition in the global and local markets in which it operates, whether from banking or non-banking actors. As such, the Group is exposed to the risk of not being able to maintain or develop its market share in its various activities. This competition may also lead to pressure on margins, which is detrimental to the profitability of the Group’s activities.

In France and in the other main markets in which the Group operates, the presence of major domestic banking and financial actors, as well as new market participants (notably online banking and financial services providers), has increased competition for virtually all products and services offered by the Group (particularly our online banking activities, with Boursorama, which had more than 2,500,000 customers at the end of 2020). Driven by new market participants such as “fintechs” and new services that are automated, scalable and based on new technologies (such as blockchain) are developing rapidly and are fundamentally changing the relationship between consumers and financial services providers, as well as the function of traditional retail bank networks. Competition with these new actors could also be exacerbated by the emergence of substitutes for central bank currency (crypto-currencies, digital central bank currency, etc.). In this context, additional investments may be necessary for the Group to be able to offer new innovative services and to be competitive with these new actors.

Consolidation in the financial services industry could result in the competitors benefiting from greater capital, resources and an ability to offer a broader range of products. Moreover, competition is also enhanced by the emergence of non-banking actors that, in some cases, may benefit from a regulatory framework that is more flexible and in particular less demanding in terms of equity capital requirements.

To address these challenges, the Group has implemented a strategy, in particular with regard to the development of digital technologies and the establishment of commercial or equity partnerships with these new actors (such as Lumo, the platform offering green investments, or Shine, the neobank for professionals). This intensification of competition could, however, adversely affect the Group’s business and results, both on the French market and internationally.

2.2.2 CREDIT AND COUNTERPARTY CREDIT RISKS

Risk-weighted assets (RWA) subject to credit and counterparty credit risks amounted to EUR 287.3 billion at 31 December 2020.

2.2.2.1 The Group is exposed to credit, counterparty and concentration risks, which may have a material adverse effect on the Group’s business, results of operations and financial position.

Due to its financing and market activities, the Group is exposed to credit and counterparty credit risks. The Group may therefore incur losses in the event of default by one or more counterparties, particularly if the Group encounters legal or other difficulties in enforcing its collateral or if the value of this collateral is not sufficient to fully recover the exposure in the event of default. Despite the Group’s efforts to limit the concentration effects of its credit portfolio exposure, it is possible that counterparty defaults could be amplified within the same economic sector or region of the world due to the interdependence of these counterparties. Moreover, some economic sectors could, in the longer term, be particularly impacted by the measures implemented to promote energy transition or by the physical risks related to climate change.

Consequently, the default of one or more significant counterparties of the Group could have a material adverse effect on the Group’s cost of risk, results of operations and financial position.

For information, at 31 December 2020, the Group’s exposure at default (EAD, excluding counterparty credit risk) was EUR 887 billion, with the following breakdown by type of counterparty: 31% on sovereigns, 28% on corporates, 23% on retail customers and 7% on credit institutions and similar. Risk-weighted assets (RWA) for credit risk totalled EUR 261 billion.

Regarding counterparty credit risks resulting from market transactions (excluding CVA), at the end of December 2020, the exposure value (EAD) was EUR 126 billion, mainly to corporates (44%) and credit institutions and similar entities (34%) and to a lesser extent to sovereign entities (19%). Risk-weighted assets (RWA) for counterparty credit risk amounted to EUR 23 billion.

The main sectors to which the Group was exposed in its corporate portfolio included financial activities (accounting for 18.1% of exposure), commercial services (10.7%), real estate (10.1%), wholesale trade (7.6%), the transport, postal services and logistics sector (7.2%), collective services (6.3%) and the oil and gas sector (5.6%).

In addition, the sectors particularly impacted by the Covid-19 pandemic are described in the risk factor 2.2.1.1 “The coronavirus pandemic (Covid-19) and its economic consequences could adversely affect the Group’s business and financial performance”.

In terms of geographical concentration, the five main countries in which the Group was exposed at 31 December 2020 were France (47% of the Group’s total EAD, mainly related to retail customers and sovereigns), the United States (12% of EAD, mainly related to corporates and sovereigns), the United Kingdom (5% of EAD, mainly related to corporates and sovereigns), the Czech Republic (4% of the Group’s total EAD, mainly related to retail clients, corporates and sovereigns) and Germany (4% of the Group’s total EAD, mainly related to corporates and retail customers).

For more details on credit and counterparty credit risks, see sections 6.6 *Quantitative information* and 7.3 *Counterparty credit risk main measures* of the present document.

2.2.2.2 The financial soundness and conduct of other financial institutions and market participants could adversely affect the Group.

Financial institutions and other market players (commercial or investment banks, mutual funds, alternative funds, institutional clients, clearing houses, investment service providers, etc.) are important counterparties for the Group in capital or inter-bank markets. Financial services institutions and financial players are closely interrelated as a result of trading, clearing, counterparty and funding relationships. In addition, there is a growing involvement in the financial markets of players with little or no regulation (hedge funds, for example). As a result, defaults by one or several actors in the sector or a crisis of confidence affecting one or more actors could result in market-wide liquidity scarcity or chain defaults, which could adversely affect the Group.

The Group is exposed to clearing institutions and their members because of the increase in transactions traded through these institutions, induced in part by regulatory changes that require mandatory clearing for over-the-counter derivative instruments standardised by these clearing counterparties. For information, the Group’s exposure to clearing houses amounted to EUR 28 billion of EAD at 31 December 2020. The default of a clearing institution or one of its members could generate losses for the Group and have an adverse effect on the Group’s business and results of operations.

The Group is also exposed on assets held as collateral for credit or derivatives instruments, with the risk that in the event of failure of the counterparty, some of these assets may not be sold or that their disposal price may not cover the entire exposure in credit and counterparty credit risks. These assets are subject to periodic monitoring and a specific management framework.

For information purposes, at 31 December 2020, the Group’s exposure (EAD) to credit and counterparty credit risks on financial institutions amounted to EUR 106 billion, representing 11% of the Group’s EAD in respect of credit risk.

2.2.2.3 The Group’s results of operations and financial position could be adversely affected by a late or insufficient provisioning of credit exposures.

The Group regularly records provisions for doubtful loans in connection with its lending activities in order to anticipate the occurrence of losses. The amount of provisions is based on the most accurate assessment at the time of the recoverability of the debts in question. This assessment relies on an analysis of the current and prospective situation of the borrower as well as an analysis of the value and recovery prospects of the debt, taking into account any security interests. In some cases (loans to individual customers), the provisioning method may call for the use of statistical models based on the analysis of historical loss and recovery data. Since 1 January 2018, the Group has also been recording provisions on performing loans under the IFRS 9 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.

IFRS 9 accounting standard principles and provisioning models could be procyclical in the event of a sharp and sudden deterioration in the environment, which has resulted in a significant increase in the net cost of risk in 2020 in anticipation of the future degradations on the basis of a multi-scenario economic approach. Such a deterioration in the operating environment could lead to a significant and/or not-fully-anticipated variation in the cost of risk and therefore in the Group’s results of operations.

At 31 December 2020, the stock of provisions relating to outstanding amounts (on- and off-balance sheet) amounted to EUR 3.6 billion on performing assets and EUR 9.3 billion on assets in default. Outstanding loans in default (Stage 3 under IFRS 9) represented EUR 18.3 billion, including 49% in France, 19% in Africa and Middle East and 16% in Western Europe (excluding France). The gross ratio of doubtful loans on the balance sheet was 3.3% and the gross coverage ratio of these loans was approximately 52%. The Group’s cost of risk stood at 64 basis points in 2020, against a cost of risk of 25 basis points in 2019.

2.2.3 MARKET AND STRUCTURAL RISKS

Market risk corresponds to the risk of impairment of financial instruments resulting from changes in market parameters, the volatility of these parameters and the correlations between these parameters. The concerned parameters include exchange rates, interest rates, as well as the prices of securities (shares, bonds) and commodities, derivatives and any other assets.

2.2.3.1 Changes and volatility in the financial markets may have a material adverse effect on the Group's business and the results of market activities.

In the course of its activities, the Group takes trading positions in the debt, currency, raw material and stock markets, as well as in unlisted shares, real estate assets and other types of assets including derivatives. The Group is thus exposed to "market risk". Volatility in the financial markets can have a material adverse effect on the Group's market activities. In particular:

- significant volatility over a long period of time could lead to corrections on risky financial assets (and especially on the riskiest assets) and generate losses for the Group;
- a sudden change in the levels of volatility and its structure, or alternative short-term sharp declines and fast rebounds in markets, could make it difficult or more costly to hedge certain structured products and thus increase the risk of loss for the Group.

Severe market disruptions and high market volatility have occurred in recent years and may occur again in the future (the Covid-19 pandemic being the latest example; see the risk factor 2.2.1.1 "The coronavirus (Covid-19) pandemic and its economic consequences could negatively affect the Group's business and financial performance" for more information), which could result in significant losses for the Group's markets activities. Such losses may extend to a broad range of trading and hedging products, including swaps, forward and future contracts, options and structured products.

In the event that a low-volatility environment emerges, reflecting a generally optimistic sentiment in the markets and/or the presence of systematic volatility sellers, increased risks of correction may also develop, particularly if the main market participants have similar positions on certain products. Such corrections could result in significant losses for the Group's market activities. The volatility of the financial markets makes it difficult to predict trends and implement effective trading strategies; it also increases risk of losses from net long positions when prices decline and, conversely, from net short positions when prices rise. Such losses could have a material adverse effect on the Group's results of operations and financial position.

Similarly, the sudden decrease, or even the cancellation of dividends, as experienced during in the Covid-19 pandemic, and changes in the correlations of different assets of the same class, could affect the Group's performance, with many activities being sensitive to these risks.

A prolonged slowdown in financial markets or reduced liquidity in financial markets could make asset disposals or position manoeuvrability more difficult, leading to significant losses. In many of the Group's activity segments, a prolonged decline in financial markets, particularly asset prices, could reduce the level of activity in these markets or their liquidity. These variations could lead to significant losses if the Group were unable to quickly unwind the positions concerned, adjust the coverage of its positions, or if the assets held in collateral could not be divested, or if their selling prices did not cover the Group's entire exposure on defaulting loans or derivatives.

The assessment and management of the Group's market risks are based on a set of risk indicators that make it possible to evaluate the potential losses incurred at various time horizons and given probability levels, by defining various scenarios for changes in market parameters impacting the Group's positions. These scenarios are based on historical observations or are theoretically defined. However, these risk management approaches are based on a set of assumptions and reasoning that could turn out to be inadequate in certain configurations or in the case of unexpected events, resulting in a potential underestimation of risks and a significant negative effect on the results of the Group's market activities.

Furthermore, in the event of a deterioration of the market situation, the Group could experience a decline in the volume of transactions carried out on behalf of its customers, leading to a decrease in the revenues generated from this activity and in particular in commissions received.

For information purposes, Global Markets & Investor Services activities, which account for most of the Group's market risks, represented EUR 4.2 billion of net banking income in the first half of 2020, or 19% of the Group's total revenues. At 31 December 2020, risk-weighted assets (RWA) subject to market risk represented EUR 15.3 billion (representing 4% of the Group's total RWA).

2.2.3.2 Changes in interest rates may adversely affect retail banking activities.

The Group generates a significant part of its income through net interest margin and as such remains highly exposed to interest rate fluctuations as well as to changes in the yield curve, particularly in its retail banking activities. The Group's results are influenced by changes in interest rates in Europe and in the other markets in which it operates. In Europe in particular, a protracted environment of low or even negative interest rates has affected and could continue to adversely affect the Group's retail banking income, notably in France.

For information, net banking income (NBI) of French retail banking amounted to EUR 7.3 billion in 2020.

For more details on structural interest rate risks, see Chapter 11 *Structural interest rate risks* of the present document and Note 8.1 *Segmented reporting* of the 2021 Universal Registration Document.

2.2.3.3 Fluctuations in exchange rates could adversely affect the Group's results.

As a result of its international activities and its geographical presence in many countries, the Group's revenues and expenses as well as its assets and liabilities are recorded in different currencies, which exposes it to the risk of exchange-rate fluctuations.

Because the Group publishes its consolidated financial statements in euros, which is the currency of most of its liabilities, it is also subject to translation risk for items recorded in other currencies, in the preparation of its consolidated financial statements. Exchange rate fluctuations of these currencies against the euro may adversely affect the Group's consolidated results, financial position and cash flows. Exchange rate fluctuations may also negatively affect the value (denominated in euros) of the Group's investments in its subsidiaries outside the eurozone.

For information, at 31 December 2020, out of a total of EUR 1,258 billion of assets on the balance sheet, 39% were recorded in euros, 37% in US dollars and 7% in yens.

See section 9.4 *Market Risk Capital Requirements and Risk-Weighted Assets* and section 11.3 *Structural exchange rate risk* of the present document, as well as Note 8.5 *Foreign exchange transactions* in Chapter 6 of the 2021 Universal Registration Document.

2.2.4 OPERATIONAL (INCLUDING RISK OF INAPPROPRIATE CONDUCT) AND MODEL RISKS

At 31 December 2020, risk-weighted assets subject to operational risk amounted to EUR 49.2 billion, or 14% of the Group's total RWA. These risk-weighted assets relate mainly to Global Markets & Investor Services (67% of total operational risk).

Between 2016 and 2020, the Group's operational risks were primarily concentrated in five risk categories, representing 93% of the Group's total operating losses over the period: fraud and other criminal activities (34%), mainly comprising external frauds, execution errors (23%), disputes with authorities (16%), errors in pricing or risk assessment, including model risk (12%) and commercial disputes (9%). The Group's other categories of operational risk (unauthorised activities in the markets, failure of information systems and loss of operating resources) remain minor, representing 7% of the Group's losses on average over the 2016 to 2020 period.

See section 10.3 *Operational risk measure* of the present document for more information on the allocation of operating losses.

2.2.4.1 The Group is exposed to legal risks that could have a material adverse effect on its financial position or results of operations.

In the case of alleged non-compliance with applicable laws and regulations, the Group and certain of its former and current representatives may be involved in various types of litigation, including civil, administrative, tax, criminal and arbitration proceedings. The large majority of such proceedings arise from transactions or events that occur in the Group's ordinary course of business. There has been an increase in client, depositor, creditor and investor litigation and regulatory proceedings against intermediaries such as banks and investment advisors in recent years, in part due to the challenging market environment. This has increased the risk, for the Group, of losses or reputational harm arising from litigation and other proceedings. Such proceedings or regulatory enforcement actions could also lead to civil, administrative, tax or criminal penalties that could adversely affect the Group's business, financial position and results of operations.

In preparing its financial statements, the Group makes estimates regarding the outcome of civil, administrative, tax, criminal and arbitration proceedings in which it is involved, and records a provision when losses with respect to such matters are probable and can be reasonably estimated. It is inherently difficult to predict the outcome of litigation and proceedings involving the Group's businesses, particularly those cases in which the matters are brought on behalf of various classes of claimants, cases where claims for damages are of unspecified or indeterminate amounts, or cases involving unprecedented legal claims. Should such estimates prove inaccurate or should the provisions set aside by the Group to cover such risks prove inadequate, the Group's financial position or results of operations could be adversely affected.

The provision recorded in the Group's financial statements for public rights disputes amounted to EUR 334 million at 31 December 2020.

For a description of the most significant ongoing proceedings, see Chapter 13 *Compliance and reputational risk, Litigations* of the present document and Notes 8.3.2 *Other provisions* and 9 *Information on risks and litigation* of Chapter 6 of the 2021 Universal Registration Document.

2.2.4.2 Operational failure, termination or capacity constraints affecting institutions the Group does business with, or failure or breach of information technology systems, especially cyber-attacks, could have an adverse effect on the Group's business and result in losses and damages to its reputation.

The Group relies heavily on communication and information systems to conduct its business and this is reinforced by the widespread use of remote banking. Any dysfunction, failure, interruption of service or breach in security of its systems, even if only brief and temporary, could result in significant disruptions to the Group's business. Such incidents could result in significant costs related to information retrieval and verification, loss of revenue, loss of customers, litigation with counterparties or customers, difficulties in managing market operations and short-term refinancing, and ultimately tarnish to the Group's reputation.

The Group is exposed to the risk of operational failure or capacity constraints in its own systems and in the systems of third parties, including those of financial intermediaries that it uses to facilitate cash settlement or securities transactions (such as clearing agents and houses and stock exchanges), as well as those of clients and other market participants.

The interconnectivity of multiple financial institutions with clearing agents and houses and stock exchanges, and the increased concentration of these entities, increases the risk that an operational failure at one institution or entity may cause an industry-wide operational failure that could adversely affect the Group's ability to conduct business and could therefore result in losses. Industry concentration, whether among market participants or financial intermediaries, can exacerbate these risks, as disparate complex systems need to be integrated, often on an accelerated basis.

The Group is also exposed to the risk of fraud, mainly external and relating to credit risks, methods of payment (cheques and credit/debit cards) and cybercrime through fraudulent attempts to break into its information systems. Every year, the Group experiences numerous cyber-attacks to its systems, or *via* those of its clients, partners or suppliers. The Group could be subject to targeted and sophisticated attacks on its IT network, resulting in embezzlement, loss, theft or disclosure of confidential or customer data (in particular in violation of the European Data Protection Regulation, "GDPR"). Such actions are likely to result in operational losses and have an adverse effect on the Group's business and results of operations.

The Group also continues to follow the IBOR reform, which aims to ensure the continuity of contracts indexed on interbank rates.

This reform still presents uncertainties concerning the timing and precise conditions of the transition between current and new indices, as well as changes that could be applicable to transactions indexed to current indices. This could lead to changes in the value of contracts, operational disruptions related to the management of interests, consequences to the accounting of transactions and their tax or prudential treatment, the need to update IT tools, etc. This reform could thus have an impact on the activities and results of the Group.

See *Information security risks* of section 10.1 *Organisation of operational risk management, Quantitative data* of section 10.3 *Measurement of operational risk* for a breakdown of operational risk losses, and section 10.4 *Risk-weighted assets and capital requirements* of the present document.

The operational risks specific to the Covid-19 pandemic are also described in the section 2.2.1.1 “The coronavirus (Covid-19) pandemic and its economic consequences could negatively affect the Group’s business and financial performance”.

2.2.4.3 Reputational damage could harm the Group’s competitive position, its activity and financial condition

The Group’s reputation for financial strength and integrity is critical to its ability to foster loyalty and develop its relationships with customers and other counterparties in a highly competitive environment. Any reputational damage could result in loss of activity with its customers or a loss of confidence on the part of its investors, which could affect the Group’s competitive position, its business and its financial condition.

As a result, negative comments regarding the Group, whether or not legitimate, and concerning events that may or may not be attributable to the Group, could deteriorate the Group’s reputation and affect its competitive position.

The Group’s reputation could also be adversely affected by a weakness in its internal control measures aimed at monitoring and preventing operational, compliance, credit and market risks, particularly with respect to monitoring inappropriate conduct of its employees (such as corruption, fraud, market abuse and tax evasion). This risk may arise from the conduct itself as well as from administrative or criminal sanctions penalising an insufficiently effective control environment, such as the sanctions issued by the US and French authorities in 2018.

Financing extended by the Bank that does not comply with regulations or its commitments could affect the Group’s reputation. Methods of distribution of products and services that do not provide sufficient information to customers, a lack of transparency in its communication (particularly financial communication) or internal management rules (including human resources management or relations with suppliers and service providers) that do not comply with regulatory obligations or the Bank’s commitments could affect the Group’s reputation. In addition, a corporate social responsibility strategy (in particular with regard to environmental issues) deemed insufficiently ambitious in relation to the expectations of external stakeholders or difficulties in implementing this strategy could also impact the Group’s reputation.

The consequences of these events, which could potentially result in legal proceedings, may vary according to the extent of media coverage and the overall context and remain difficult to estimate.

For more information about reputation risk please see Chapter 13 “Compliance risks, Litigations” of the present document and section 5.2.1 *Satisfying clients by ensuring their protection* of Chapter 5 *Corporate Social Responsibility* of the 2021 Universal Registration Document.

2.2.4.4 The Group’s inability to attract and retain qualified employees may adversely affect its performance.

The Group employs more than 133,251 people[1] in 61 countries. The Group’s human resources are key assets of the Group, its business model and value proposition. Inadequate career or skills management (integration, career prospects and training, or in terms of compensation levels in line with market practice, etc.) could affect the performance of the Group’s banking and financial activities. The Group’s inability to attract and retain employees, a high rate of turnover or the departure of strategic employees could expose the Group to a loss in its know-how as well as a deterioration in the quality of service, at the expense of client satisfaction.

Furthermore, the increased oversight of compensation policies to which the banking sector is subject, including rules on certain types of compensation (fixed, variable, performance conditions, deferred payments, etc.), may limit the Group’s ability to attract and retain talent. This is the case in particular of the CRD IV directive, which has applied since 2014 to banks in the European Economic Area and therefore to the Group, and of the CRD V directive applicable from January 2021. This directive includes a cap on the variable component of compensation compared to its fixed component for the relevant personnel, which could reduce the Group’s ability to attract and retain employees.

2.2.4.5 The models, in particular the Group’s internal models, used in strategic decision-making and in risk management systems could fail, face delays in deployment or prove to be inadequate and result in financial losses for the Group.

Internal models used within the Group could prove to be deficient in terms of their conception, calibration, use or monitoring of performance over time in relation to operational risk and therefore could produce erroneous results, engendering more specifically financial consequences.

In particular:

- the valuation of certain financial instruments that are not traded on regulated markets or other trading platforms, such as OTC derivative contracts between banks, uses internal models that incorporate unobservable parameters. The unobservable nature of these parameters results in an additional degree of uncertainty as to the adequacy of the valuation of the positions. In the event that the relevant internal models prove unsuitable for changing market conditions, some of the instruments held by the Group could be misvalued and the Group could incur losses. For illustrative purposes, financial assets and liabilities measured at fair value on the balance sheet categorised within level 3 (for which the valuation is not based on observed data) represented EUR 12.6 billion and EUR 46 billion, respectively, at 31 December 2020 (see Note 3.4.1 and Note 3.4.2 of Chapter 6 of the consolidated financial statements included in the second amendment to the 2020 Universal Registration Document on financial assets and liabilities measured at fair value);
- the assessment of customer solvency and the Bank’s exposure to credit and counterparty credit risk is generally based on historical assumptions and observations that may prove to be inappropriate in light of new economic conditions and is based on economic scenarios and projections that may not adequately anticipate unfavourable economic conditions or the occurrence of unprecedented events. This miscalculation could, among other things, result in an under-provisioning of risks and an incorrect assessment of capital requirements;
- hedging strategies used in market activities rely on models that include assumptions about the evolution of market parameters and their correlation, partly inferred from historical data. These models could be inappropriate in certain market environments (in the event of strong movements in volatility resulting, for example, from a new Covid-19 pandemic wave, from the evolution of the trade war between the United States and China, or from Brexit), leading to an ineffective hedging strategy and causing unanticipated losses that could have a material adverse effect on the Group’s results and financial position;

(1) *Number of employees at the end of 2019 excluding temporary staff.*

- management of the interest rate risk of the investment portfolio and of the liquidity risk of all balance sheet and off-balance sheet items uses behavioural models that depend on market conditions. These models, based in particular on historical observations, could have an impact on the hedging of these risks when unprecedented events occur.

In addition, the Group has initiated an evolution of its system of internal credit risk models (project “Haussmann”). This evolution could have a significant impact on the calculation of its RWA credit and counterparty credit risk in the event of delay in the schedule for submitting its models to the supervisor or in the event of late validation by the supervisor.

2.2.4.6 The Group may incur losses as a result of unforeseen or catastrophic events, including health crises, terrorist attacks or natural disasters.

The Group remains dependent on its natural and social environment. The occurrence of a new epidemic or pandemic crisis (such as the Covid-19 pandemic) or a crisis related to the pollution of the natural environment could have a significant impact on the Group’s activities. Also, terrorist attacks, natural disasters (including earthquakes, such as in Romania, and floods, such as the exceptional flooding of the Seine in Paris), extreme weather conditions (such as heatwaves), or major social unrest (such as the *Gilets jaunes* movement in France) could disturb the Group’s activities.

Such events could create economic and financial disruptions or lead to operational difficulties (including travel limitations or relocation of affected employees) for the Group.

These events could impair the Group’s ability to manage its businesses and also expose its insurance activities to significant losses and increased costs (such as higher re-insurance premiums). Upon the occurrence of such events, the Group could incur losses.

2.2.5 LIQUIDITY AND FUNDING RISKS

2.2.5.1 The Group’s access to financing and the cost of this financing could be negatively affected in the event of a resurgence of financial crises or deteriorating economic conditions

In past crises (such as the 2008 financial crisis, the eurozone sovereign debt crisis or more recently the tensions on the financial markets linked to the Covid-19 pandemic before the intervention of the central banks), access to financing from European banks was intermittently restricted or subject to less favourable conditions.

If unfavourable debt market conditions were to reappear following a new systemic or Group-specific crisis, the effect on the liquidity of the European financial sector in general and on the Group in particular could be very significantly unfavourable and could have an adverse impact on the Group’s operating results as well as its financial position.

For several years, central banks have taken measures to facilitate financial institutions’ access to liquidity, in particular by lowering interest rates to historical lows and by setting up TLTRO (Targeted Longer-Term Refinancing Operations) type facilities. In the event that central banks put an end to these extraordinary measures, the Group could face an unfavourable evolution of its financing cost and of its access to liquidity.

In addition, if the Group were unable to maintain a satisfactory level of deposits from its customers, it could be forced to resort to more expensive financing, which would reduce its net interest margin as well as its results.

The Group’s regulatory short-term liquidity coverage ratio (LCR) stood at 149% at 31 December 2020 and liquidity reserves amounted to EUR 243 billion at 31 December 2020.

2.2.5.2 A downgrade to the Group’s external rating or to the sovereign rating of the French state could have an adverse effect on the Group’s cost of financing and its access to liquidity.

For the proper conduct of its activities, the Group depends on access to financing and other sources of liquidity. In the event of difficulties in accessing the secured or unsecured debt markets on terms it considers acceptable, due to market conditions or factors specific to the Group, or if it experiences unforeseen outflows of cash or collateral, including material decreases in customer deposits, its liquidity could be impaired. In addition, if the Group is unable to maintain a satisfactory level of customer deposits collection, it may be forced to turn to more expensive funding sources, which would reduce the Group’s net interest margin and results.

The Group is exposed to the risk of an increase in credit spreads. The Group’s medium- and long-term financing cost is directly linked to the level of credit spreads which can fluctuate depending on general market conditions. These spreads can also be affected by an adverse change in France’s sovereign debt rating or the Group’s external ratings by rating agencies.

The Group is currently monitored by four financial rating agencies: Fitch Ratings, Moody’s, R&I and Standard & Poor’s. The downgrading of the Group’s credit ratings, by these agencies or by other agencies, could have a significant impact on the Group’s access to funding, increase its financing costs and reduce its ability to carry out certain types of transactions or activities with customers. This could also require the Group to provide additional collateral to certain counterparties, which could have an adverse effect on its business, financial position and results of operations.

The deterioration of the economic environment following the health crisis and its impact on the Group, particularly in terms of profitability and cost of risk, could increase the risk of external ratings downgrades. The Group’s ratings could be placed under negative watch or be subject to a downgrade. In addition, France’s sovereign ratings could also be downgraded due to an increase in its debt and deficits (further increased by the Covid-19 pandemic and the response measures taken by the French government). These elements could have a negative impact on the Group’s financing costs and its access to liquidity. The Group’s ratings by Fitch Ratings, Moody’s, R&I and Standard & Poor’s are available on the Group’s website (*https://investors.societegenerale.com/en/financial-and-non-financial-information/ratings/credit-ratings*).

Access to financing and liquidity constraints could have a material adverse effect on the Group’s business, financial position, results of operations and ability to meet its obligations to its counterparties.

For 2021, the Group has planned a funding programme of approximately EUR 16 billion in vanilla long-term debt, in senior preferred and secured debt as well as in senior non-preferred debt and subordinated debt.

At 31 December 2020, the Group had raised a total of EUR 37.2 billion of long-term funding (EUR 34.3 billion for the parent company and EUR 2.9 billion for its subsidiaries) which relates, at the parent company level, to senior structured issues (EUR 18 billion), subordinated issues (EUR 2.6 billion), senior vanilla non-preferred issues (EUR 9.8 billion), unsecured senior vanilla preferred issues (EUR 2.6 billion) and secured issues (EUR 1.3 billion).

2.2.6 RISKS RELATED TO INSURANCE ACTIVITIES

2.2.6.1 A deterioration in market conditions, and in particular a significant increase or decrease in interest rates, could have a material adverse effect on the life insurance activities of the Group's Insurance business.

In the first half of 2020, the Group's insurance activities represented net banking income of EUR 0.9 billion, or 4% of the Group's consolidated net banking income. The Group's Insurance Division is mainly focused on Life Insurance. At 31 December 2020, life insurance contracts registered outstanding amounts of EUR 126 billion, divided between euro-denominated contracts (68%) and unit-linked contracts (32%).

The Group's Insurance business is highly exposed to structural interest-rate risk due to the high proportion of bonds in the euro-denominated funds in its life insurance contracts. The level of and changes in interest rates may, in certain configurations, have a material adverse effect on the results and financial position of this business line.

With its impact on the yield of euro-denominated contracts, a prolonged outlook of low interest rates reduces the attractiveness of these products for investors, which can negatively affect fundraising and income from this segment of the life insurance business.

A sharp rise in interest rates could also degrade the competitiveness of the life insurance offerings in euros (compared with bank savings products, for example) and trigger significant repurchases and arbitrage operations by customers, in an unfavourable context of unrealised losses on bond holdings. This configuration could affect the revenues and profitability of the Life Insurance business.

More generally, a pronounced widening of spreads and a decline in equity markets could also have a significant negative effect on the results of the Group's life insurance business.

In the event of a deterioration in market parameters, the Group could be required to strengthen the own funds of its insurance subsidiaries to enable them to continue meeting their regulatory capital requirements.

3

RISK MANAGEMENT ORGANISATION

IN BRIEF

This section describes Societe Generale's risk management approaches and strategies. It describes how the functions in charge of risk management are organised, how these functions guarantee their independence and how they broadcast the risk culture within the Group.

3.1 SUITABILITY OF RISK MANAGEMENT SYSTEMS

The Pillar 3 report, published under the responsibility of Societe Generale Group's Senior Management, sets out, in accordance with the CRR regulation, the quantitative and qualitative information on Societe Generale's capital, liquidity and risk management to ensure transparency in respect of the various 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 Group Risk Appetite Framework and Group Risk Appetite Statement.

ADAPTATION OF THE RISK MANAGEMENT SYSTEM TO COVID-19

The Societe Generale Group has been, like all economic players, strongly impacted by the Covid-19 pandemic and by the economic, financial and social consequences of the crisis. From the outset of the crisis, the risk management organisation has been adapted to ensure the continuity of monitoring and control activities, while remaining attentive to the protection of the Group's employees. As part of the large-scale roll-out of working-from-home measures, the Group has remained particularly vigilant with regard to the control of its operational risks and the security of its information systems.

Governance was also strengthened during this period by activating crisis units and generating more frequent reports, whether intended for Management, the Board of Directors or the supervisor. These included indicators adapted to the context (monitoring of sectors with sensitive activity and/or weakened by the economic crisis, business continuity, etc.).

3.2 RISK APPETITE

Risk appetite is defined as the level of risk that the Group is prepared to accept to achieve its strategic goals.

Principles governing risk appetite

The Group's ambition is to pursue sustainable development based on a diversified and balanced banking model with a strong European anchor and a targeted global presence in selected areas of strong business expertise. The Group also wishes to maintain long-term relationships with its clients built on the mutual confidence deserved and to meet the expectations of all of its stakeholders.

This results in:

- an organisation with 16 Business Units offering various products and services to the Group's clients in different geographic locations;
- a balanced capital allocation between activities:
  - a preponderance of retail banking activities in France and abroad, which currently represent around 60% of risk weighted assets ("RWA") of the Group,
  - limitation of Business Unit Global Markets' share in the RWA of the Group. In accordance with its client-focused development strategy, the Group also announced the closure of its proprietary trading activities[1], and promotes a simplification of the products offered,
  - non-bank services activities, in particular Insurance, are conducted in line with the business strategy; they demonstrate a disciplined risk profile and thus generating a profitability compliant with the Group's expectations;
- a geographically balanced model:
  - in Retail Banking, the Group focuses its development on Europe and Africa where it enjoys an historic presence, extensive knowledge of the markets and top-tier positions,
  - as regards Global Banking and Investor Solutions, outside the Europe and Africa zones, the Group targets activities for which it can leverage international expertise;
- a targeted growth policy, favouring existing areas of expertise, a sound quality business fund and the search for synergies in the diversified banking model;
- a positive contribution to the transformations of our economies, in particular with regard to the technological revolution, and economic, social and environmental transitions; CSR concerns are therefore at the heart of its strategy and the Group's relationships with stakeholders;
- a strong vigilance as regards its reputation, deemed by the Group to be a high-value asset which must be protected.

(1) *In accordance with French banking law, the Group's few residual trading activities with no connection to clients were isolated in a dedicated subsidiary called Descartes Trading, which was closed in February 2020.*

A robust financial strength profile

The Group seeks to achieve sustainable profitability, relying on a robust financial profile consistent with its diversified banking model, by:

- aiming for profitable and resilient business development;
- maintaining a target rating allowing access to financial resources at a cost consistent with the development of the Group's businesses and its competitive positioning;
- calibrating its capital and hybrid debt targets to ensure:
  - meeting the minimum regulatory requirements on capital ratios,
  - one-year coverage of the "internal capital requirement" using available CET1 capital,
  - a sufficient level of creditor protection consistent with a debt issuance programme that is particularly hybrid consistent with the Group's objectives in terms of rating and regulatory ratios such as Tier 1, TLAC ("Total Loss Absorbing Capacity"), MREL ("Minimum Requirement for own funds and Eligible Liabilities"), and the leverage ratio;
- ensuring resilience of its liabilities, which are calibrated by taking into account a survival horizon in a liquidity stress ratio, compliance with LCR (Liquidity Coverage Ratio) and NSFR (Net Stable Funding Ratio) regulatory ratios and the level of dependence on short-term fundings;
- controlling the leverage ratio through a leverage ratio target.

Credit risk (including concentration effects)

Credit risk appetite is managed through a system of credit policies, risk limits and pricing policies.

When it takes on credit risk, the Group focuses on medium- and long-term client relationships, targeting both clients with which the bank has an established relationship of trust and prospects representing profitable business development potential over the mid-term.

Acceptance of any credit commitment is based on in-depth client knowledge and a thorough understanding of the purpose of the transaction.

In a credit transaction, risk acceptability is based first on the borrower's ability to meet its commitments, in particular through the cash flows which will allow the repayment of the debt. For medium and long-term operations, the funding duration must remain compatible with the economic life of the financed asset and the visibility horizon of the borrower's cash flow.

Security interests are sought to reduce the risk of loss in the event of a counterparty defaulting on its obligations, but may not, except in exceptional cases, constitute the sole justification for taking the risk. Security interests are assessed with prudent value haircuts and paying special attention to their actual enforceability.

Complex transactions or those with a specific risk profile are handled by specialised teams within the Group with the required skills and expertise.

The Group seeks risk diversification by controlling concentration risk and maintaining a risk allocation policy through risk sharing with other financial partners (banks or guarantors).

Counterparty ratings are a key criterion of the credit policy and serve as the basis for the credit approval authority grid used in both the commercial and risk functions. The rating framework relies on internal models. Special attention is paid to timely updating of ratings (which, in any event, are subject to annual review).

The risk measure of the credit portfolio is based primarily on the Basel parameters that are used to calibrate the capital need. As such, the Group favours the so-called advanced Basel models (AIRB), which are more risk-sensitive and more adapted to the specific characteristics of the bank's portfolio. These measures are complemented by an internal stress-sized risk assessment, either at the global portfolio level or at the sub-portfolio level, linking risk measures and rating migration to macro-economic variables. In addition, the calculation of expected losses under the provisions of IFRS9, used to determine the level of impairment on healthy outstanding amounts, provides additional insight into assessing portfolio risk.

In consultation with the Risk Department, the businesses implement pricing policies that are differentiated according to the level of risk of counterparties and transactions. The purpose of pricing a transaction is to ensure acceptable profitability, in line with the objectives of ROE (Return on Equity) of the business or entity, after taking into account the cost of the risk of the transaction in question. However, the pricing of an operation may be adapted in some cases to take into account the overall profitability and the development potential of the customer relationship.

Proactive management of counterparties whose situation has deteriorated is key to containing the risk of final loss in the event of counterparty failure. As such, the Group implements rigorous procedures to monitor counterparties whose risk profiles are deteriorating. In addition, the trades and entities, in conjunction with the Risk sector, and through collaborators specializing in recovery and litigation, work together to effectively protect the Bank's interests in the event of default.

Counterparty credit risk

Counterparty credit risk management is based on a combination of several types of indicators:

- indicators of potential future exposures (potential future exposures, or PFE), aimed at measuring exposure to our counterparties:
  - the Group controls idiosyncratic counterparty credit risks *via* a set of CVaR (Counterparty VaR)[1] limits. The CVaR measures the potential future exposure linked to the replacement risk in the event of default by one of the group's counterparties. The CVaR is calculated for a 99% confidence level and different time horizons, from one day until the maturity of the portfolio,
  - in addition to the risk of a counterparty default, the CVA (Credit Valuation Adjustment) measures the adjustment of the value of our portfolio of derivatives and repos account the credit quality of our counterparties;

(1) The CVaR economic indicator is built on the same modelling assumptions as the regulatory Effective Expected Positive Exposure (EEPE) indicator used to calculate RWAs.

- the abovementioned indicators are supplemented by stress test frameworks or on nominal ones in order to capture risks that are more difficult to measure:
  - the more extreme correlation risks are measured *via* stress tests at different levels (wrong-way risk, stress monitoring at sector level, risk on collateralised financing activities and agency),
  - the CVA risk is measured *via* a stress test in which representative market scenarios are applied, notably involving the credit spreads of our counterparties;
- exposures to clearing houses (CCP) are subject to specific supervision:
  - the amount of collateral posted for each segment of a CCP: the initial posted margins, both for our principal and agency activities, and our contributions to CCP default funds,
  - in addition, a stress test measures the impact linked to the default of a member of a CCP;
- the Global Stress Test on market activities includes cross market-counterparty risks, it is described in more detail in the "Market risk" section.

Market risk

The Group's market activities are carried out in the context of a business development strategy primarily focused on meeting client requirements with a full range of products and solutions.

Market risk is strictly managed through a set of limits for several indicators (such as stress tests, Value at Risk (VaR) and stressed Value at Risk (SVaR), "sensitivity" and "nominal" indicators). These indicators are governed by a series of limits proposed by the business lines and approved by the Risk Division within the framework of a discussion-based process.

The choice of limits and their calibration reflect qualitatively and quantitatively the fixing of the Group's appetite for market risks. A regular review of these frameworks also allows risks to be controlled in a closely manner according to changing market conditions with, for example, a temporary reduction of limits in case of a deterioration. Warning thresholds are also in place to prevent the possible occurrence of overstays.

Limits are set at different sub-levels of the Group, thereby cascading down the Group's risk appetite from an operational standpoint within its organisation.

Within these limits, the Global Stress Test limits on market activities and the Market Stress Test limits play a pivotal role in determining the Group's market risk appetite; in fact, these indicators cover all operations and the main market risk factors as well as risks associated with a severe market crisis which helps limit the total amount of risk and takes account of any diversification effects.

Operational risk (including reputation and compliance risk)

The Group is exposed to a diversity of operational risks inherent in its business: execution errors, internal and external fraud, IT system failures, malicious acts against IT systems, loss of operational resources, commercial disputes, failure to comply with tax obligations, but also risk of non-compliance, unappropriated behaviour or even reputation.

As a general rule, the Group has no appetite for operational risk or for non-compliance risk. Furthermore, the Group maintains a zero-tolerance policy on incidents severe enough to potentially inflict serious harm to its image, jeopardise its results or the trust displayed by customers and employees, disrupt the continuity of critical operations or call into question its strategic focus.

The Group underscores that it has is no or very low tolerance for operational risk involving the following:

- internal fraud: the Group does not tolerate unauthorised trading by its employees. The Group's growth is founded on trust, as much between employees as between the Group and its employees. This implies respecting the Group's principles at every level, such as exercising loyalty and integrity. The Group's internal control system must be capable of preventing acts of major fraud;
- cybersecurity: The Group has zero tolerance for fraudulent intrusions, in particular those resulting in the theft of customer data or a major operational disruption. The Group intends to introduce effective means to prevent and detect this risk. It is adequately organised to deal with potential incidents;
- data leaks: the Group is committed to deploying the necessary resources and implementing controls to prevent, detect and remediate data leaks. It does not tolerate any leaks of its most sensitive information, in particular that of customer data;
- business continuity: the Group relies heavily on its information systems to perform its operations and is therefore committed to deploying and maintaining the resilisence of its information systems to ensure the continuity of its most essential services. The Group has very low tolerance for the risk of downtime in its information systems that perform essential functions, in particular systems directly accessible to customers or those enabling it to conduct business on financial markets;
- outsourced services: the Group seeks to achieve a high degree of thoroughness in the control of its activities entrusted to external service providers. As such, the Group adheres to a strict policy of reviewing its providers;
- managerial continuity: the Group intends to ensure the managerial continuity of its organisation to avoid the risk of a long-term absence of a manager that would question the achievement of its strategic objectives, which might threaten team cohesion or disrupt the Group's relationships with its stakeholders.

Structural interest rate and exchange rate risks, risk to employee commitments

The Group measures and strictly controls structural risks. The mechanism whereby rate risk, foreign exchange risk and the risk on pension/long-service obligations is controlled is based on sensitivity or stress limits which are broken down within the various businesses (entities and business lines).

There are four main types of risk: rate level risk, curve risk book, optional risk (arising from automatic options and behavioural options) and basis risk, related to the impact of relative changes in interest rates indices. The Group's structural interest rate risk management primarily relies on the sensitivity of Net Present Value ("NPV") of fixed-rate residual positions (excesses or shortfalls) to interest rate changes according to several interest rate scenarios. Limits are set by the Finance Committee or the Board of Directors at the Business Unit/Service Unit and Group levels. Furthermore, the Group measures and controls the sensitivity of its net interest margin ("NIM") on different horizons.

The Group's policy consists of requesting entities to hedge their exposure to currency fluctuations by endorsing all on- and off-balance sheet positions and controlling residual exposure by setting low limits. In addition, at Group level, the hedging policy consists of reducing as far as possible the sensitivity of its CET1 ratio to fluctuations in exchange rates.

Regarding risks to pension and long-service obligations, which are the bank's long-term obligations towards its employees, the amount of the provision is monitored for risk on the basis of a specific stress test and an attributed limit. The risk management policy has two main objectives: reduce risk by moving from defined-benefit plans to defined-contribution plans and optimise asset risk allocation (between hedge assets and performance assets) where allowed by regulatory and tax constraints.

Liquidity and financing risks

Controlling liquidity risk is based primarily on:

- compliance with regulatory liquidity ratios, with precautionary buffers: LCR (liquidity coverage ratio) ratios that reflect a stress situation and NSFR (net stable funding ratio);
- the off-cap US dollar LCR surplus, which is used to inform the internal management of dollar liquidity risk;
- framing of transformation and anti-transformation positions (price risk).

Controlling financing risk is based on:

- maintaining a liability structure to meet the Group's regulatory constraints (Tier1, Total Capital, Leverage, TLAC, NSFR, MREL) and complying with rating agencies' constraints to secure a minimum rating level;
- capping the use of market and short-term cash financing; in particular, the hold in wholesale unsecured financing markets is governed by a dedicated metric.

Model risk

The Group is committed to defining and deploying internal standards to reduce model risk on the basis of key principles, including the creation of three independent lines of defence, the proportionality of due diligence according to each model's level of risk inherent, the consideration of the models' entire lifecycle and the appropriateness of the approaches within the Group.

Risk related to insurance activities

The Group conducts Insurance activities (Life Insurance and Savings, Retirement savings, Property & Casualty Insurance, etc.) which exposes the Group to two major types of risks:

- subscription risk related to pricing and fluctuations in the claims ratio;
- risks related to financial markets (interest rate, credit and equity) and asset-liability management.

Private equity risk

The Group has limited appetite for financial holdings, such as proprietary private equity transactions. The investments allowed are mainly related to:

- commercial support for the network through the activities of MCIB, *Crédit du Nord*, and certain subsidiaries abroad;
- taking stakes, either directly or through investment funds, in innovative companies *via* SG Ventures;
- the takeover of stakes in local companies: Euroclear, *Crédit Logement*, etc. which is not subject to a limit.

3.3 RISK APPETITE – GENERAL FRAMEWORK

Risk appetite is determined at Group level and attributed to the businesses and subsidiaries. Monitoring of risk appetite is performed according to the principles described in the Risk Appetite Framework governance and implementation mechanism, which are summarised below.

Governance

As part of the supervision of risk appetite, the Group relies on the following organisation:

- The Board of Directors:
  - approves the Group Risk Appetite Statement and the Group Risk Appetite Framework, as well as the Group Risk Appetite Framework,
  - ensures that risk appetite is relevant to the Group's strategic and financial objectives and its vision of the risks of the macro-economic and financial environment,
  - reviews quarterly the risk appetite dashboards presented to it, and is informed of risk appetite overruns and remediation action plans,
  - sets the compensation of corporate officers, sets out the principles of the remuneration policy applicable in the Group, especially for regulated persons whose activities may have a significant impact on the Group's risk profile, and ensures that they are in line with risk management objectives.

The Board of Directors relies primarily on the Risk Committee.

- General Management:
  - approves the Risk Appetite Statement and its Risk Appetite Framework based on the proposal of the Chief Risk Officer and the Deputy General Manager, Head of Finance,
  - regularly ensures that risk appetite is respected,
  - ensures the effectiveness and integrity of the risk appetite implementation system,
  - ensures that the risk appetite for the Group's Business Units and subsidiaries/branches is formalised and translated into frameworks consistent with the Group's risk appetite,
  - ensures internal communication of risk appetite and its transposition in the Universal Recording Department.

In addition, the main mission of the Risk Department is to develop the Group's risk appetite, as well as the implementation of a risk management, monitoring and control system.

The Finance Department contributes to setting this risk appetite in the framework of indicators under the responsibility of the Finance Committee (profitability, solvency, liquidity and structural risks).

The Compliance Department is also responsible for instructing the risk appetite setting for indicators falling within its scope.

Identification of risks

The identification of risks is the cornerstone of the Group's risk management framework which implies on an ongoing basis the whole of Business Units and allows to identify all the risks[1] that are or could be significant. The approach is global and holistic: it covers all types of risks and all Group exposures.

In addition to the annual review of the Group's risk taxonomy in the context of risk appetite, risk identification is based on two pillars in order to ensure a complete and up-to-date view of all the material risks facing the Group is exposed:

- risk management governance and key committees such as CORISQs at Group or Business Unit level or New Product Committees making it possible to monitor changes in the risk profile for all types of risk (credit, market, operation, etc.). In addition to monitoring well-identified risks, this governance can also generate a debate between risk experts and senior management on emerging risks. This debate is fueled by the latest market news, early warning signals, internal alerts, and more;
- a series of exercises aimed at identifying additional risks, for example arising from changes in macroeconomic or sectoral conditions, financial markets, regulatory constraints, competitors/market pressure, business model (effects concentration) and changes in banking organisations. These additional identification exercises are also organised by risk types, but include some identification of the effects of cross-risk (*e.g.* credit and market or credit and operational). For a given type of risk, these exercises analyse/segment the Group's exposure along several axes (Business Unit/activity/customer/product/region...). For the perimeters where this risk is assessed as significant, the underlying risk factors are identified.

When a significant risk is identified, a risk management system, which may include a quantitative risk appetite (risk ceiling/threshold) or a risk policy, is implemented.

In addition, where possible, the risk factors underlying a significant risk are identified and combined in a dedicated scenario, and the associated loss is then quantified by means of a stress test (see also section "Risk quantification and stress test system").

Risk quantification and stress test system

For each material risk identified, indicators to measure this risk are put in place to ensure monitoring. These indicators can be based on measurements of outstanding amounts (risk weighted or not), sensitivities to the variation of one or more risk factors (interest rate, etc.), impacts of stress tests based on scenarios, etc. These indicators can be expressed as ratios and are sometimes the subject of regulatory or publication requirements.

(1) Risks are classified on the basis of the Group's risk taxonomy, which names and defines the categories of risks and their possible subcategories.

Regarding more specifically stress tests, or crisis simulations, they assess what would be the behaviour of a portfolio, activity, entity or Group in a context of degraded activity.

Within the Group, stress tests contribute to the identification, measurement and management of risks, as well as to the assessment of the adequacy of capital and liquidity to the Group's risk profile.

Thus, the stress tests:

- are a privileged measure of the resilience of the Group, its activities and its portfolios, and are an integral part of the process of building risk appetite;
- are based on hypothetical economic scenarios defined in conjunction with the Economic and Sectoral Studies department, or historical scenarios. The stress tests break down these scenarios into impacts on the Group's activities, by taking into account the reaction capacities of the activities, by systematically combining quantitative methods and expert judgment (risks, finance or business lines);
- can also be based on sensitivity analysis (single or multi-factor risk).

The stress test system thus comprises:

- a global stress test, integrated into the budget process (Strategic and financial plan), to ensure that the Group’s profile meets its objectives in the event of an adverse scenario, but also to quantify the deterioration in the profitability of the Business Units in this scenario. The stress test system is an integral part of the ICAAP (Internal Capital Adequacy Assessment Process);
- specific stress tests by type of risk or portfolio:
  - stress tests on credit risk complete the overall analysis with a more granular approach, and thus shed light on the fixing of risk appetite at a portfolio, activity, etc. They are also used to refine the identification, measurement and operational management of this risk,
  - stress tests on market activities are based on historical and hypothetical scenarios and apply to the entire Group. They are supplemented by specific sensitivity stress tests on certain risk factors (rates, equities, etc.) or certain activities (emerging markets, etc.). A stress test limit is established for these different risk measures,
  - stress tests assess the sensitivity of structural interest rate risk. The exercise focuses on changes in the economic value of assets and liabilities in bank portfolios and on changes in the net interest margin generated by these assets and liabilities. The Group sets limits on these sensitivities in scenarios of translation and deformation (steepening and flattening) of the yield curves,
  - a stress test on social commitments consists of simulating the impact of variations in market risk factors (inflation, interest rate, etc.) on the Group’s net position (dedicated investments minus the corresponding social commitments). A stress test limit is established on this indicator,
  - liquidity stress tests,
  - an assessment of operational risk under stress uses the scenario analysis and loss modelling work carried out to calibrate the Group's capital requirement in terms of operational risk, and makes it possible to understand the exposure to operational losses, including exposure to rare and severe losses not present in the history,
  - stress tests of insurance activities support the process of defining the risk appetite of the Insurance Business Unit, which is based on minimum objectives of profitability and solvency in central scenario and in stressed scenario. In addition, the Insurance Business Unit uses also results from stress tests in order to define its hedging policy, the distribution of its assets as well as the dividend distribution policy;
- reverse stress tests, both as part of the risk appetite and therecovery plan. The impact of these stress tests is typically defined by a breaking point in the solvency ratio or liquidity indicator, which poses a significant threat to the Bank. Hypothetical scenarios leading to this breaking point are then constructed in order to identify new weaknesses.

In addition to internal stress test exercises, the Group is part of the sample of European banks participating in major international stress test programmes piloted by the EBA (European Banking Authority) and the ECB (European Central Bank).

In addition, and specifically on climate risk, the Group participates on a voluntary basis in exploratory climate stress exercises organised by ACPR (*Autorité de Contrôle Prudentiel et de Résolution*) and the European Banking Authority in 2020.

DEFINITION OF THE “CENTRAL” AND “STRESS” ECONOMIC SCENARIOS

Central scenario

Its construction is based first of all on a set of observed factors: recent economic situation, economic policy orientations (budgetary, monetary and exchange rate policy), etc. From these observed factors, economists determine the most likely trajectory of economic and financial variables for the desired forecast horizon.

Stressed scenario

The severity of the stress scenario, determined by the deviation of the GDP trajectory from the central scenario, is based on the magnitude of the 2008-2009 crisis and has been adjusted to take into account the impacts, both health, economic and financial, of the Covid-19 crisis on the basis of current knowledge.

Setting and formalisation of risk appetite at Group level

The Group's risk appetite is formalised in a document (“Risk Appetite Statement”) which sets out:

- the strategic profile of the Group;
- its profile of profitability and financial soundness;
- the frameworks relating to the management of the Group's main risks (qualitative, through risk policies, and quantitative, through indicators).

Regarding the profile of profitability and financial soundness, the Finance Department proposes each year, upstream of the budgetary procedure, to the General Management, financial targets at Group level. These targets, supplemented by alert thresholds and crisis levels according to a “Traffic light” approach, allow:

- to respect, with a sufficient safety margin, the regulatory obligations to which the Group is subject (in particular the minimum regulatory solvency, leverage and liquidity ratios), by anticipating as best as possible the implementation of new regulations;
- to ensure, *via* a safety margin, sufficient resistance to stress scenarios (stress standardised by regulators or stress defined according to a process internal to the Group).

The frameworks relating to risk management, also represented *via* a graduated approach (limits, alert thresholds, etc.), result from a process in which the needs expressed by the businesses are confronted with a contradictory opinion independent from the second line defence. The latter is based on:

- independent analysis of risk factors;
- the use of prospective measures based on stress approaches;
- the proposal for a framework.

For the main risks, the frameworks set make it possible to consolidate the achievement of the Group’s financial targets and to orient the Group’s profitability profile.

Allocation of risk appetite within the organisation

The allocation in risk appetite within the organisation is based on the strategic and financial plan, and on risk management systems:

- on a proposal from the Finance Department to the General Management, the financial targets defined at Group level are broken down into budget allocation targets at business level, within the framework of the budget and the strategic and financial plan;
- concerning the breakdown of frameworks and risk policies, it is based on an understanding of the needs of the businesses and their business prospects and takes into account the objectives of profitability and financial soundness of the Business Unit and/or the entity.

3.4 RISK MANAGEMENT ORGANISATION

Implementing a high-performance and efficient risk management structure is a critical undertaking for the group Societe Generale in all businesses, markets and regions in which it operates, as is maintaining a balance between strong awareness of risks and promoting innovation. The Group’s risk management, supervised at the highest level, is compliant with the regulations in force, in particular the Order of 3 November 2014 relating to the internal control of companies in the banking sector, payment services and investment services subject to the control of the French Prudential Supervisory and Resolution Authority (Autorité de contrôle prudentiel et de résolution – ACPR) and European Regulations Basel 3 (CRR/CRD). (See Board’s Expertise, p. 82 of the Universal Registration Document).

The main objectives of the Group’s risk management strategy are:

- to contribute to the development of the Group’s businesses and profitability by defining the Group’s risk appetite in conjunction with the Finance Division and the business divisions;
- to contribute to the Group’s sustainability by establishing a risk management and monitoring system;
- to reconcile the independence of the risk management system (with respect to the businesses) with close collaboration with the core businesses, which have primary responsibility for the transactions they initiate.

Governance of risk management

Two main high-level bodies govern Group risk management: the Board of Directors and General Management.

General Management presents the main aspects of, and notable changes to, the Group’s risk management strategy to the Board of Directors at least once a year (more often if circumstances so require).

Within the Board of Directors, the Risk Committee (see Art. 11 of the Internal rules of the Board of Directors, p. 87 of the Universal Registration Document) 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 Board of Directors’ Audit and Internal Control Committee (see Art. 10 of the Internal Rules of the Board of Directors, p. 86 of the Universal Registration Document) ensures that the risk control systems operate effectively.

Chaired by General Management, the specialised Committees responsible for central oversight of internal control and risk management are as follows:

- **the Risk Committee** (CORISQ), which met 22 times in 2020, has for objective to define the Group’s key priorities in terms of risk policies (credit, country, market and operational risks), within the framework of the risk appetite and the financial targets set by the Group Strategy Committee, and to monitor compliance of same. Subject to the powers attributed to the Board of Directors, the CORISQ, based on proposals from the Risk Division, takes the main decisions relating to the management of various risks (credit risks, country risks, market and operational risks). Along with the Risks Committee, the Major Risks Committee (*Comité Grands Risques*) is an *ad hoc* body that validates the commercial strategy and risk taking with regard to large client groups;

- **the Finance Committee** (COFI) is responsible for setting out the Group's financial strategy and for managing scarce resources (capital, liquidity, balance sheet, tax capacity) in the context of the allocation and management of structural risks. The COFI, upon proposals from the Finance division and the Risk division, validates the structural risk oversight and management framework for the Group and its significant entities, and reviews changes in such risks (limits and consumption). It periodically assesses the consumption of scarce resources. It reviews the financial panorama, ILAAP and ICAAP documents, ongoing issues regarding to ALM, Liquidity, the Preventive Recovery Plan, and the Corporate Center budget and intra-group re-invoicing. Lastly, it addresses issues pertaining to the Group's taxation (managed jointly by the Finance division and the General Secretary);
- **the Compliance Committee** (COMCO) meets quarterly to define the Group's main guidelines and principles in terms of compliance iciedents; under the responsibility of the Compliance Department, it is chaired by the General Management;
- **the Digital Transformation Committee (DTCO)**, in line with the Group strategy Committee's decisions, initiates and monitors the transformations of the information system and the related operational model which require a decision by the General Management due to their transverse nature or by the scale of the envisaged transformation, a decision by the General Management;
- **the Group Internal Control Coordination Committee** (CCCIG) is responsible for the overall architecture of the Group's internal control system: for evaluating its efficiency, consistency and comprehensiveness of the system, 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 monitoring

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 General 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 General Management.

- The primary role of the **Risk Division** is to support the development of the Group's activities and profitability by defining the Group's risk appetite (allocated between the Group's different business lines) in collaboration with the Finance Division and the Business and Service Units, and establishing a risk management and monitoring system in its capacity as a second line of defence.

  In performing its work, the Risk Division reconciles independence from the businesses with a close working relationship with the Businesses Units, which are responsible in the first instance for the transactions they initiate.

  Accordingly, the Risk Division:

  - provides hierarchical and functional supervision for the Group's Risk function,
  - is jointly responsible, with the Finance Division, for setting the Group's risk appetite as recommended to General Management,
  - identifies all Group risks,
  - implements a governance and monitoring system for these risks, including cross-business risks, and regularly reports on their nature and extent to General Management, the Board of Directors and the banking supervisory authorities,
  - contributes to the definition of risk policies, taking into account the objectives of the businesses and the relevant risk issues,
  - defines or validates the methods and procedures used to analyse, measure, approve and monitor risks,
  - implements a second-level control to ensure the correct application of these methods and procedures,
  - assesses and approves transactions and limits proposed by business managers,
  - defines or validates the architecture of the central risk information system and ensures its suitability to business requirements.
- **The Finance Division** is organised according to three levels of supervision, each reporting to a Chief Financial Officer:

  - French Retail Banking, and International Retail Banking and Financial Services,
  - Global Banking and Investor Solutions,
  - cross-business functions, bringing together all the areas of expertise that are key to the Finance Division.

  It also carries out extensive accounting and finance controls. As such:

  - **the Group Accounting Department** is responsible for coordinating the mechanism used to draw up the Group's consolidated financial statements,
  - **the Experts on Metrics and Reporting Department** is responsible for producing the regulatory reports of the Group,
  - the **Mutualised Transactions Processing Department** manages the shared service centers of the Finance Division with the support of its Paris teams and the oversight of Finance teams in Bucharest and Bangalore,
  - **the Finance Control Department** is responsible for the second-level permanent control system over all the Finance Processes,
  - **the Asset and Liability Management Department** is in charge of the ALM function for the Group, of controlling the Group's liquidity and exchange rate risks, as well as the operational management of ALM for the Societe Generale Parent Company (SGPM).

The other cross-business functions provide various tasks for the Finance Division, in particular with the Finance Division of the Group Service Units, Group Investor Relations and Financial Communication, Human Resources and the Corporate Secretary.

- **The Finance Departments of the Business Units and Service Units,** which report hierarchically to the Group Finance Division, ensure that the financial statements are prepared correctly at the local level and control the quality of the information in the financial reports (accounting, management control, regulations, etc.);
- T**he Group Compliance Division** is responsible for defining and ensuring the consistency of the system for preventing and controlling the risk of non-compliance, as well as for coordinating the system intended to prevent, detect, assess and control reputational risk in the entire Group;

- **The Corporate Secretary** brings together:
  - 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 Corporate Social Responsibility Department, which is in charge of defining and proposing a policy in favour 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's Administrative 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 Resources and Innovation Division** is specifically responsible for defining information system security policies;
- **The Group Internal Audit and General Inspection Division** is in charge of internal audits and reports to the Head of Group Internal Audit.

According to the last census carried out on a declarative basis (as of 31 December 2020), the full-time equivalent workforce (FTE):

- of the Group's Risk Department represent around 5,463 FTE:
  - including 4,620 as second line of defence, *i.e.* 1,536 within the Group Risk Division itself and 3,084 in the rest of the Risk sector: the Risk Management Function,
  - and including 857 as first line of defence on issues of operational risks, crisis management and the fight against fraud;
- the Compliance function had approximately 3,900 FTE employees;
- the Information System Security function had approximately 630 FTE employees.

Risk reporting and assessment systems

The Group's data aggregation system operates at two levels and has clearly defined responsibilities. The teams of Business Units and Service Units and entities provide data collection and quality functions for both local and Group consolidation needs, as well as a first level of aggregation when necessary. The cross-business teams of the Finance Department and the Risk Department aggregate this data and produce Group-wide risk indicators and reports.

Since 2015, the Group has defined architectural principles relating to Finance and Risk information systems. The TOMFIR principles (Target Operating Model for Finance & Risk) revolve around the following objectives:

- the production of risk indicators is based on data from Business Units and certified entities (Golden sources), the granularity of the contract and accounting quality. The data are updated daily and fed by the operational systems of the entities;
- the Group-level information system manages its own data aggregation rules to avoid multiplying local developments at BU and entity level. It is based on Group-wide benchmarks, subject to the benchmarks of Business Units and entities;
- the IS architecture must address Finance and Risk uses to meet local needs and needs shared with the Group.

These architectural principles are applied to the following four main application areas:

- the mutual Finance and Risk information system for credit risk and the calculation of RWA;
- interest rate and liquidity risk calculation chains;
- the market risk calculation chain;
- the counterparty credit risk calculation chain on market operations.

The significant strengthening of the Finance and Risks information system launched in 2015, in line with the TOM-FIR architecture principles, was initially aimed at increasing our data aggregation and risk management capacities. Despite the delay in the first half of 2021 of some milestones in the planned trajectory, the action plans have been largely implemented and allow the Group to reach a new level of maturity at the end of 2020 with:

- feeding the Group's credit risk systems with the commitments of retail customers at contract level on all the BCBS 239 priority entities;
- the ability to produce liquidity indicators more quickly in a crisis situation on the most critical perimeter;
- deployment of data warehouses on new significant entities in the Retail Banking and International Financial Services scope;
- the faster production of monthly Group rate risk indicators;
- the ability to manage the NIM (Net Interest Margin) centrally over a wide area;
- the industrialisation of almost all of market risk's main indicators and the strengthening of the certification of these indicators by centralising controls and alerts.

INTEREST RATE BENCHMARK REFORM

As part of the reform of interbank rates ('IBOR' rates), the Group is pushing ahead with its efforts towards the significant deadline of the end of 2021. The project structure, which the Group has placed under the leadership of the General Management (DGLE), pursues a dual objective: on the one hand, to prepare the Group to deal with "Risk Free Rates", and on the other hand to prepare the migration of the stock of operations in progress indexed to IBOR rates which will expire successively after 2021 and 2023.

In 2014, the Financial Stability Board considered on interbank rates, that uncertainty related to IBOR rates and their termination, if left unchecked, constituted systemic vulnerability and risk.

The Group assesses its own main risks as follows:

- governance and programme execution risk that could lead to delays and lost opportunities is monitored as part of the regular Committee and arbitration bodies;
- risk of legal documentation that could lead to post-transition litigation is managed by the introduction of fallback clauses in transactions depending on the presence of market standards and the support of external firms in the renegotiation of bilateral contracts;
- market risk with the creation of a basic risk between the rate curves associated with the different indices is the subject of close monitoring and supervision;
- operational risks in the execution of transaction migrations, depending on the willingness and preparedness of our customers, the volume of transactions to be migrated and their spread over time;
- risk of "conduct" associated with the announced end of LIBORs, managed in particular through specific group guidelines and broken down by entity. Training for teams and communications to clients (conferences, events, bilateral points, especially with less well-informed clients) are organised on the associated risks, the alternative solutions that could be deployed, and the way in which they could be affected.

TABLE 5: FINANCIAL ASSETS AND LIABILITIES AND DERIVATIVES IMPACTED BY THE INTEREST RATE BENCHMARKS REFORM

(In EURbn)		Exposures at 30.09.2020		
		Remaining capital		Notional Amounts(1)
	New risk-free rates likely to replace current benchmark interest rates	Financial assets(2) (excluding derivatives) impacted by the reform	Financial liabilities(3) (excluding derivatives) impacted by the reform	Derivatives(4) impacted by the reform
EURIBOR - Euro Interbank Offered Rate		106	6	3,463
EONIA - Euro OverNight Index Average	Euro Short-Term Rate (EUR STR)	4	16	495
LIBOR - London Interbank Offered Rate - USD	Secured Overnight Financing Rate (SOFR)	35	3	2,536
LIBOR - London Interbank Offered Rate - GBP	Reformed Sterling Overnight Index Average (SONIA)	4	0	568
LIBOR - London Interbank Offered Rate - CHF	Swiss Average Rate Overnight (SARON)	0	0	63
LIBOR - London Interbank Offered Rate - JPY	Tokyo Overnight Average (TONA)	0	1	641
LIBOR - London Interbank Offered Rate - EUR	Euro Short-Term Rate (€STR)	1	0	7
TOTAL		**150**	**26**	**7,774**

(1) Notional amounts used in combination with a reference interest rate to calculate derivative cash flows.
(2) Of which accounts receivable, loans, securities received under repurchase agreements, debt securities bearing interest at variable rates.
(3) Of which deposits, borrowing, transaction of securities given in delivered reseal, debt issued in the form of securities bearing interest at variable rates.
(4) Of which firm instruments (swap and futures) and conditional instruments.

4

INTERNAL CONTROL FRAMEWORK

IN BRIEF

This section describes the framework and application of internal control at Societe Generale.

4.1 INTERNAL CONTROL

Internal control is part of a strict regulatory framework applicable to all banking institutions.

In France, the conditions for conducting internal controls in banking institutions are defined in the Order of 3 November 2014. This Order, which applies to all credit institutions and investment companies, defines the concept of internal control, together with a number of specific requirements relating to the assessment and management of the various risks inherent in the activities of the companies in question, and the procedures under which the supervisory body must assess and evaluate how the internal control is carried out.

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.

The Board of Directors ensures that Societe Generale has a solid governance system and a clear organisation ensuring:

- a well-defined, transparent and coherent sharing of responsibilities;
- effective procedures for the detection, management, monitoring and reporting of risks to which the Company could be exposed.

To implement this set up, it gives mandate to the Group General Management which is tasked with rolling out the Group's strategic guidelines.

The Audit and Internal Control Committee (CACI) is a Board of Directors' committee that is specifically responsible for preparing the decisions of the Board in in the area of internal control supervision.

As such, General Management submits reports to the Audit and Internal Control Committee on the internal control of the Group. The Committee monitors the implementation of remediation plans when it considers the risk level to be justified.

Control is based on a **body of standards and procedures.**

All Societe Generale Group activities are governed by rules and procedures covered by a set of documents referred to collectively as the "Normative Documentation", compiled in the Societe Generale Code, which:

- set out the rules for action and behaviour applicable to Group staff;
- define the structures of the businesses and the sharing of roles and responsibilities;
- describe the management rules and internal procedures specific to each business and activity.

The Societe Generale Code comprises the Normative Documentations which:

- define the governance of the Societe Generale Group, the structures and duties of its Business Units and Services Units, as well as the operating principles of the cross-business systems and processes (Codes of Conduct, charters, etc.);
- set out the operating framework of an activity and the management principles and rules applicable to products and services rendered, and also define internal procedures.

The Societe Generale Code exerts force of law within the Group. It falls under the responsibility of the Group Corporate Secretary.

In addition to the Societe Generale Code, operating procedures specific to each Group activity are applied. The rules and procedures in force are designed to follow basic rules of internal control, such as:

- segregation of functions;
- immediate, irrevocable recording of all transactions;
- reconciliation of information from various sources.

Multiple and evolving by nature, risks are present in all business processes. Risk management and control systems are therefore key to the Bank's ability to meet its targets.

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 Company's management body of the undertaking in its executive function.

Internal control in particular aims to:

- prevent malfunctions;
- assess the risks involved, and exercise sufficient control to ensure they are managed;
- ensure the adequacy and effectiveness of internal processes, particularly those which help safeguard assets;
- detect irregularities;
- guarantee the reliability, integrity and availability of financial and management information;
- check the quality of information and communication systems.

The internal control system is based on **five basic principles:**

- the comprehensive scope of the controls, which cover all risk types and apply to all the Group's entities;
- the individual responsibility of each employee and each manager in managing the risks they take or supervise, and in overseeing the operations they handle or for which they are responsible;
- the responsibility of functions, in line with their expertise and independence, in defining normative controls and, for three of them, exercising second-level permanent control;
- the proportionality of the controls to the materiality of the risks involved;
- the independence of internal auditing.

The internal control framework is organised on the "**three lines of defence**" model, in accordance with the Basel Committee and European Banking Authority guidelines:

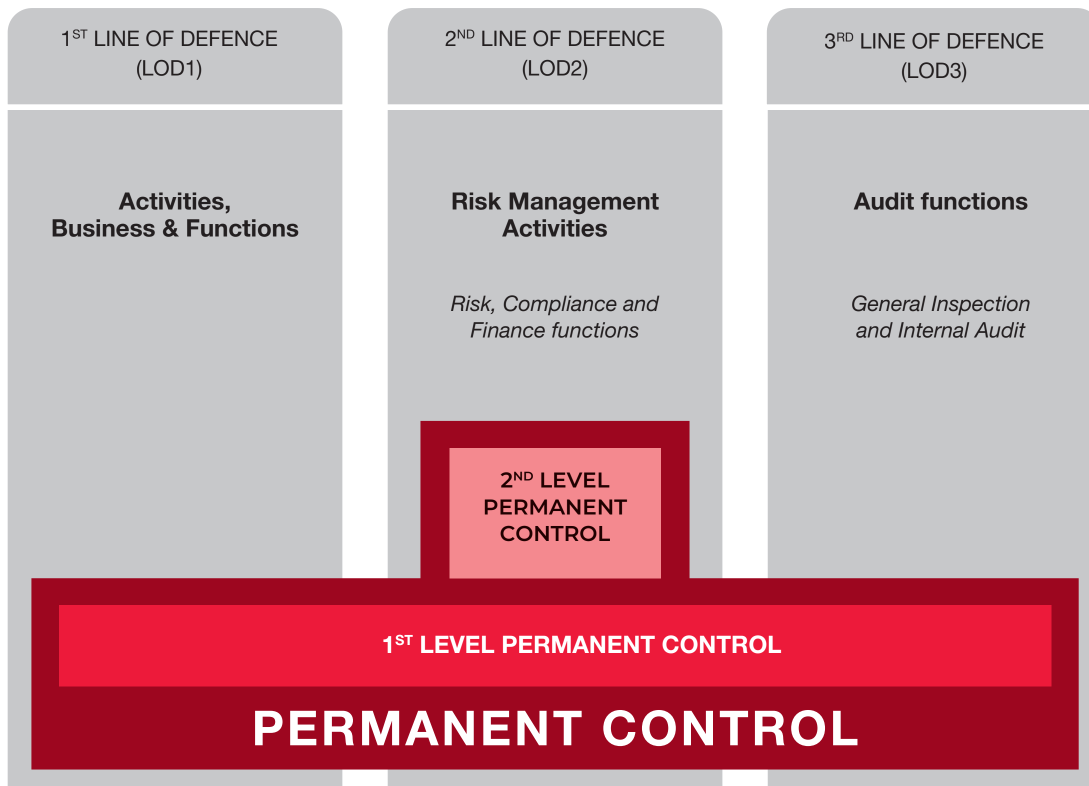
- the **first line of defence** comprises all Group employees and operational management, both within the Business Units and the Services Units in respect of their own operations;

  Operational management is responsible for risks, their prevention and their management (by putting in place first-level permanent control measures, among other things) and for implementing corrective or remedial actions in response to any deficiencies identified by controls and/or process steering;
- the **second line of defence** is provided by the compliance, finance and risk functions.

Within the internal control framework, operational management is responsible for verifying the proper and continuous running of the risk security and management operation functions through the effective application of established standards, defined procedures, methods and requested controls.

Accordingly, these functions must provide the necessary expertise to define in their respective fields the controls and other means of risk management to be implemented by the first line of defence, and to ensure that they are effectively implemented; they conduct second-level permanent control over all of the Group's risks, employing the controls they have established, where appropriate with 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, which encompasses the General Inspection and Internal Audit functions. This division performs periodic internal audits that are strictly independent of the business lines and the permanent control function;
- **internal control coordination,** which falls under the responsibility of a Deputy Chief Executive Officer, is also provided at Group level and is rolled out in each of the divisions and core businesses.



A Deputy Chief Executive Officer is responsible for ensuring the overall consistency and effectiveness of the internal control system. This Deputy Chief Executive Officer also chairs the Group Internal Control Coordination Committee (Group ICCC), which comprises the Chief Risk Officer, the Chief Financial Officer, the Group Chief Compliance Officer, the Group Chief Information Officer, the Head of Group Internal Audit, and the Head of Internal Control Coordination.

The Group Internal Control Coordination Committee met 12 times in 2020. It addressed the following issues:

- review of the effectiveness of permanent control in each Business Unit (BU) and Service Unit (SU);
- review of the effectiveness and consistency of the Group internal control framework;
- review of the Group quarterly permanent control dashboard prior to its communication to the Group Audit and Internal Control Committee (CACI);
- transversal review of cybersecurity and security tools and resources.

The organisation implemented at Group level to coordinate the actions of the various participants in internal control is coordinated in each Business Unit (BU) and Service Unit (SU). All of the Group's BUs and SUs have an Internal Control Coordination Committee. Chaired by the Head of Business Unit (BU) and Service Unit (SU), these Committees bring together the competent Heads of Internal Audit and Permanent Control for the Business Unit (BU) and Service Unit (SU) in question, as well as the Head of Group Internal Control Coordination and the Heads of the Group-level control functions.

Permanent control system

The Group's permanent control system comprises:

- **first-level permanent control,** which is the basis of the Group's permanent control, is performed by the businesses. Its purpose is to ensure, at operational level, the security, quality, regularity and validity of transactions completed;
- **second-level permanent control,** which independent of the businesses, concerns three divisions, *i.e.* the Compliance, Risk and Finance Divisions.

In 2018, General Management initiated a transformation programme of the Group's permanent control system, which is under its direct supervision. Through a set of actions focusing on areas such as standards, methods, tools, procedures and training, the programme served to consolidate the control culture and optimise risk control, and thus helps to improve the quality and the reliability of services provided to our customers and partners. All scheduled deadlines were

met and the programme's long-term activities are being transferred to operating teams. The transfer is set to be completed in 2021.

FIRST-LEVEL PERMANENT CONTROL

Permanent Level 1 controls, carried out on operations performed by BUs and the SUs, ensure the security and quality of transactions and the operations. These controls are defined as a set of provisions constantly implemented to ensure the regularity, validity, and security of the operations carried out at operational level.

The permanent Level 1 controls consist of:

- **any combination of actions and/or devices that may limit the likelihood of a risk occurring or reduce the consequences for the company:** these include controls carried out on a regular and permanent basis by the businesses or by automated systems during the processing of transactions, automated or non-automated security rules and controls that are part of transaction processing, or controls included in operational procedures. Also falling into this category are the organisational arrangements (*e.g.*, segregation of duties) or governance, training actions, when they directly contribute to controlling certain risks;
- **controls performed by managers:** line managers control the correct functioning of the devices for which they are responsible. As such, they must apply formal procedures on a regular basis to ensure that employees comply with rules and procedures, and that Level 1 controls are carried out effectively.

Defined by a Group entity within its scope, Level 1 controls include controls (automated or manual) that are integrated into the processing of operations, proximity controls included in operating procedures, safety rules, etc. They are carried out in the course of their daily activities by agents directly in charge of an activity or by their managers. These controls aim to:

- ensure the proper enforcement of existing procedures and control of all risks related to processes, transactions and/or accounts;
- alert management in the event of identified anomalies or malfunctions.

Permanent Level 1 controls are set by management and avoid, as far as possible, situations of self-assessment. They are defined in the procedures and must be traced without necessarily being formalised, *e.g.* preventive automated controls that reject transations that do not comply with system-programmed rules.

In order to coordinate the operational risk management system and the permanent Level 1 control system, the BUs/SUs deploy a specific department called CORO (Controls & Operational Risks Office department).

SECOND-LEVEL PERMANENT CONTROL

The permanent Level 2 control ensures that the Level 1 control works properly:

- the scope includes all permanent Level 1 checks, including managerial supervision checks and checks carried out by dedicated teams;
- this review and these audits aim to give an opinion on (i) the effectiveness of Level 1 controls, (ii) the quality of their implementation, (iii) their relevance (including, in terms of risk prevention), (iv) the definition of their modus operandi, (v) the relevance of remediation plans implemented following the detection of anomalies, and the quality of their follow-up, and thus contribute to the evaluation of the effectiveness of Level 1 controls.

The permanent level 2 control, control of the controls, is carried out by teams independent of the operational.

These controls are performed centrally by dedicated teams within Risk Service Unit (RISQ/CTL), Compliance Service Unit (CPLE/CTL) and Finance Service Unit (DFIN/CTL) and locally by the second-level control teams within the BU/SUs or entities.

Internal audit

Reporting to the Group Head of Inspection and Audit, the Inspection and Audit Service Unit (IGAD) is the Group's third line of defence.

The IGAD Service Unit comprises General Inspection (IGAD/INS), Internal Audit Departments (IGAD/AUD) and a support function (IGAD/COO). To fulfil its mandate, the Group's IGAD Service Unit has adequate resources from a qualitative and quantitative point of view. The Group's Inspection and Audit Service Unit has about 1,100 employees.

The Group Head of Inspection and Audit reports directly to the Group Chief Executive Officer, with whom it has regular meetings. The Group Head of Inspection and Audit meets regularly with the Chairman of the Board of Directors. The Audit and Internal Control Committee and the Risk Committee refer to the Group Head of Inspection and Audit on their initiative or at his request on any subject. The Group Head of Inspection and Audit participates in the Internal Control Committee and the Risk Committee meetings. Moreover, bilateral meetings are held as needed between the Group Head of Inspection and Audit and the chairpersons of these Committees.

The Inspection and Audit Service Unit (IGAD) is part of the Group's internal control framework. IGAD carries out an internal audit mandate through its missions. In that role it is strictly independent from the Group's business units and permanent control functions.

In line with standards set by the IIA (Institute of Internal Auditors), IGAD's internal audit mandate is defined as an independent and objective activity that provides the Group with assurance as to how effectively it is controlling its operations, advises on improvements and contributes to the creation of added value. By carrying out this mandate, Inspection and Internal Audit help the Group to achieve its targets, by evaluating systematically and methodically, its processes for risk management, control and corporate governance and making proposals to increase their efficiency.

The Inspection and Audit Service Unit exercises a key role in the Group's risk management set-up and can assess any of its components.

Under this mandate, the General Inspection and Internal Audit assess (i) the quality of risk management within an audited scope, (ii) the permanent control framework is adequately structured and effective, (iii) management's risk awareness and compliance with conduct rules and expected professional practices.

Whilst Audit Departments are delivering solely an internal audit role, General Inspection has, in addition to its internal audit role, a mandate to undertake other engagements such as any type of analysis or research mission, be involved in the assessment of strategic projects or intervene on specific subjects as requested by General Management. Such assignments, limited with regards to resources dedicated to them, are carried out within a framework ensuring that ethical principles defined in Institute of Internal Auditors' Standards are being met.

The General Inspection also supervises the roll-out of data-analysis initiatives within the scope of Inspection and Audit activities. This mission is ensured *via* a dedicated data-lab (INS/DAT), under the responsibility of an Inspection Managing Director *(inspecteur principal)*. The General Inspection also supervises and coordinates the Service Unit's relationship with regulators.

IGAD has six distinct Audit Departments aligned with the Group organisation. Audit Departments placed under the supervision of a Head of internal Audit, each have the responsibility for a scope of activity. A matrix organisation allows coverage of the main cross-business issues at the Group level. In France, the internal Audit teams are hierarchically linked to the Inspection unit. Audit Department Heads based in branches or affiliates overseas are reporting to the local entity's Head. However, for the delivery of their internal audit role, they are placed under the hierarchical supervision of the Internal Audit Head in charge of their region or entity.

Inspection and Audit teams work together on an annual risk assessment to define the Inspection and Audit plans for the upcoming year. IGAD teams regularly work together on joint assignments. They issue recommendations to correct issues identified in risk management and generally improve operations and risk management. IGAD teams are subsequently in charge of monitoring the effective implementation of these recommendations.

4.2 CONTROL OF THE PRODUCTION AND PUBLICATION OF FINANCIAL MANAGEMENT INFORMATION

The players involved

There are many participants in the production of financial data:

- the **Board of Directors**, and more specifically its **Audit and Internal Control Committee**, has the task of examining the draft financial statements which are to be submitted to the Board, as well as verifying the conditions under which they were prepared and ensuring not only the relevance but also the consistency of the accounting principles and methods applied. The Audit and Internal Control Committee's remit also is to monitor the independence of the Statutory Auditors, and the effectiveness of the internal control, measurement, supervision and control systems for risk related to the accounting and financial processes. The Statutory Auditors meet with the Audit and Internal Control Committee during the course of their assignment;
- the **Group Finance Division** gathers all accounting and management data compiled by the subsidiaries and the Business Units/Services Units in a set of standardised reports. It consolidates and verifies this information so that it can be used in the overall management of the Group and disclosed to third parties (supervisory bodies, investors, etc.). It also has a team in charge of the preparation of the Group regulatory reports;

  In the framework of these missions, it is in charge of:

  - monitoring the financial aspects of the Group's capital transactions and its financial structure,
  - managing its assets and liabilities, and consequently defining, managing and controlling the Group's financial position and structural risks,
  - ensuring that the regulatory financial ratios are respected,
  - defining accounting standards, frameworks, principles and procedures for the Group, and ensuring that they are observed,
  - verifying the accuracy of all financial and accounting data published by the Group;
- the **Finance Divisions of subsidiaries and Business Units/Services Units** carry out certification of the accounting data and entries booked by the back offices and of the management data submitted by the front offices. They are accountable for the financial statements and regulatory information required at the local level and submit reports (accounting data, finance control, regulatory reports, etc.) to the Group Finance Division. They can perform these activities on their own or else delegate their tasks to Shared Service Centers operating in finance and placed under Group Finance Division governance;
- the **Risk Division** consolidates the risk monitoring data from the Group's Business Units/Services Units and subsidiaries in order to control credit, market and operational risks. This information is used in Group communications to the Group's governing bodies and to third parties. Furthermore, it ensures in collaboration with the Group Finance Division, its expert role on the dimensions of credit risk, structural liquidity risks, rates, exchange rates, on the issues of recovery and resolution and the responsibility of certain closing processes, notably the production of solvency ratios;
- the **Back offices** are responsible for all support functions to front offices and ensure contractual settlements and deliveries. Among other responsibilities, they check that financial transactions are economically justified, book transactions and manage means of payment.

Accounting and regulatory standards

Local financial statements are drawn up in accordance with local accounting standards, and the consolidated Group financial statements are prepared in accordance with the standards defined by the Group Finance Division, which are based on IFRS as adopted by the European Union.

The applicable standards on solvency and liquidity, promulgated by the Basel Committee, were translated into European law by a directive (CRD4) and a regulation (CRR). They were completed by the Regulation CRR2 and the Directive CRD5 which entered into force on 28 June 2019. These texts are supplemented by several delegated acts and implementation technical standards. The Societe Generale Group identified as a "financial conglomerate" is subjected to an additional supervision.

The Group Finance Division has dedicated teams that monitor the applicable normative regulations and draft new internal standards to comply with any changes in the accounting and regulatory framework.

Procedures for producing financial and accounting data

Each entity within the consolidation scope within the Group prepares its own accounting and management statements on a monthly basis. This information is then consolidated each month at Group level and published for the markets on a quarterly basis. Data reported are subject to analytical reviews and consistency checks performed by Finance Divisions or, by delegation under their responsibility, by Shared Service Centers operating in finance, and sent to the Group Finance Division. The Group Finance Division transmits the consolidated financial statements, Management Reports and regulatory statements to General Management and any interested third parties.

In practice, procedures have been tailored to the growing complexity of products and regulations. Moreover, specific action plans for adaptation can be implemented where necessary.

Internal control procedures governing the production of financial and accounting data

Accounting data are compiled independently of the front offices and the sales teams.

The quality and objectivity of the accounting and management data are insured by the separation of sales functions and all the functions of operational processing and follow-up of the operations: back offices and middle offices integrated into Resources Division and teams in charge of result production integrated into Finance Division. These teams carry out a series of controls defined by Group procedures on financial and accounting data, in particular:

- verification of the economic justification of all information reported;
- reconciliation, within the specified deadlines, of accounting and management data, using specific procedures;
- on market activities, reconciliation between the accounting result (produced by Finance Division) and the economic result (produced by an expert' department dedicated within the Risk Division).

Given the increasing complexity of the Group's financial activities and organisation, staff training and IT tools are regularly upgraded to ensure that the production and verification of accounting and management data are effective and reliable.

SCOPE OF CONTROL

In practice, the internal control procedures implemented in the Group's businesses are designed to guarantee the quality of financial and accounting information, and notably to:

- ensure that the transactions entered in the Group's accounts are exhaustive and accurate;
- validate the valuation methods used for certain transactions;
- ensure that transactions are correctly assigned to the corresponding fiscal period and recorded in the accounts in accordance with the applicable accounting regulations, and that the accounting aggregates used to prepare the Group financial statements are compliant with the regulations in force;
- ensure the inclusion of all entities that must be consolidated in accordance with Group regulations;
- check that the operational risks associated with the production and transmission of accounting data through the IT system are correctly controlled, that the necessary adjustments are accurately performed, that the reconciliation of accounting and management data is satisfactory, and that the flows of cash payments and other items generated by transactions are exhaustive and adequate.

CONTROL BY THE FINANCE DEPARTMENTS

The Finance Department of each subsidiary verifies the accuracy and consistency of the financial statements with respect to the relevant accounting frameworks (local standards and IFRS for subsidiaries, as well as French standards for branches). It performs checks to guarantee the accuracy of the information disclosed.

The data received for consolidation from each subsidiary are drawn from corporate accounting data by the subsidiaries, after they have been locally brought into compliance with Group accounting principles.

Each subsidiary must be able to explain the transition from the company financial statements to the financial statements reported through the consolidation tool.

The Finance Departments of Business Units/Services Units have a dedicated department to management and financial monitoring.

CONTROL BY THE SHARED SERVICE CENTRES OPERATING IN FINANCE

Shared Service Centers operating in finance perform first-level controls, as necessary to ensure the reliability of the accounting, tax and regulatory information, on the financial statements they produce in accordance with Local and IFRS standards and notably data quality and consistency checks (equity, securities, foreign exchange, financial aggregates from the balance sheet and income statement, deviations from standards), justification and certification of the financial statements under their responsibility, intercompany reconciliation of the financial statements, regulatory statement checks and verification of evidence of tax charges and balances (current, deferred and duties).

These controls are declared within the managerial supervision and Group accounting certification processes.

These controls allow the Shared Services Centers to provide all necessary information to the Finance Departments of Business Units/Services Units and the Group Finance and Accounting Division to ensure the reliability and consistency of the accounts so established.

SUPERVISION BY THE GROUP FINANCE DIVISION

Once the financial statements produced by the entities have been restated according to Group standards, they are entered into a central database and processed to produce the consolidated statements.

The service in charge of consolidation within Group Accounting Officer Department, checks that the consolidation scope is compliant with the applicable accounting standards and performs multiple verifications on data received for consolidation. These verifications include:

- confirmation that the data collected are properly aggregated;
- verification of recurring and non-recurring consolidation entries;
- exhaustive treatment of critical points in the consolidation process;
- treatment of any residual differences in reciprocal or intercompany statements.

Ultimately, this service ensures that the overall consolidation process has been conducted properly by performing analytical reviews of the summary data and verifying the consistency of the main aggregates of the financial statements. Changes in shareholders' equity, goodwill, provisions and any deferred taxes consolidated in the fiscal year are also analysed.

Within this department, a team is in charge of managing and coordinating the quarterly Group accounting certification framework in order to certify first-level controls on a quarterly basis (internal control certification).

The Group Finance Division has also a dedicated team, reporting directly to it, which is responsible for ensuring second-level permanent control with respect to all Finance processes and the animation of this framework within the Group. Its mission is to ensure the effectiveness, quality and relevance of the Level 1 control framework, through evaluation of the framework through process or activity reviews, testing of controls and monitoring of certifications Quarterly. This team is also functionally attached to the Head of Permanent & Internal Control Division of Societe Generale Group.

Accounting audit framework

CONTROLS BY ALL OPERATIONAL STAFF INVOLVED IN THE PRODUCTION OF ACCOUNTING, FINANCIAL AND MANAGEMENT DATA

The operational staff monitor their activity *via* a permanent supervision process, under the direct responsibility of their management teams, repeatedly verifying the quality of the controls carried out on accounting data and the associated accounting treatment.

CONTROLS THROUGH AUDITS AND SPECIALISED AUDIT TEAMS OF THE INTERNAL AUDIT DIVISION

Internal Audit and the General Inspection define their audits and inspections using a risk-based approach and define an annual work program, (*plan de tournée* of Inspection and audit plan). As part of their assignments, teams may verify the quality of the control environment contributing to the quality of the accounting and management data produced by the audited entities. They may check a certain number of accounts and assess the reconciliations between accounting and management data, as well as the quality of the permanent supervision procedures for the production and control of accounting data. They also assess the performance of IT tools and the accuracy of manual processing.

The team in charge of auditing the Corporate Divisions is also responsible for auditing the Group Finance Division. Placed under the responsibility of a dedicated business correspondent, the team coordinates and monitors all audits related to accounting and financial matters on a Group-wide basis. The team provides expertise in identifying the Group's main accounting risks and carries out audits to verify the adequate application of accounting standards in areas deemed to be the most significant for the accuracy of the Group's accounting information. The team also organises training sessions and develops methodologies to help share expertise in the auditing of accounting risks.

Based on their findings, these teams issue recommendations to the parties involved in the production and control of accounting, financial and management data in order to improve this process through more specific initiatives targeted towards particular entities or activities.

5

CAPITAL MANAGEMENT AND ADEQUACY

IN BRIEF

This section provides details on capital resources, regulatory requirements and the composition of the leverage ratio.

Evolution of CET1 capital

+ EUR 1.5bn*

(between 2019 and 2020)

Evolution of total regulatory capital

+ EUR 2.5bn*

CET1 ratio at end 2020

13.4%*

Figures taking into account:

- *as at 31 December 2020, the IFRS 9 phasing (fully-loaded CET1 ratio of 13.2%, the phasing effect being +28 bps);*
- *as at 31 December 2019, the restatement for 2019 dividend cancellation, in accordance with restrictions to the payment of dividends imposed by European Authorities.*

5.1 REGULATORY FRAMEWORK

Since January 2014, Societe Generale has been applying the new Basel 3 Regulation implemented in the European Union *via* a directive (CRD4) and a regulation (CRR).

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 the related capital requirements, according to standard or more advanced methods;
- Pillar 2 concerns 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 taking into account 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.

Some amendments to the European regulatory legislation were adopted in May 2019 (CRR2/CRD5). Although several of the new amendments are already in force, most of the new provisions will enter into force in June 2021.

The new provisions include the following:

- NSFR: the text introduces regulatory requirements related to the NSFR ratio. A 100% ratio has to be met as of June 2021;
- leverage ratio: a 3% minimum requirement to which an additional 50% buffer for systemic entities will be added from 2023;
- counterparty derivatives risk: the "SA-CCR" Basel method replaces the current "CEM" method to calculate the prudential exposure to derivatives using the Standardised Approach (SA);
- large exposures: the main change concerns the calculation of the regulatory limit (25%) on Tier 1 (instead of total capital), as well as the introduction of a cross-specific limit on systemic institutions (15%);
- TLAC: The ratio requirement for G-SIBs has been introduced in CRR. According to the Basel text, the G-SIBs must have an amount of eligible capital and debt equal to the highest between 16%+risk-weighted capital buffers and 6% of the leverage exposure in 2019, the ratio increasing to 18%+weighted risk cushions and 6.75% leverage in 2022.

With regard to the implementation of the market risk reform (FRTB), after the publication of the first revised standard in January 2016 and of the consultation in March 2018 on this subject, the Basel Committee published in January 2019 its final text: BCBS457. In March 2020, the Basel Committee announced a one-year delay in the implementation of FRTB (1 January 2023 instead of 1 January 2022 as originally planned in the January 2019 text).

The European FRTB calendar would be as follows:

- regarding reporting requirements:
  - in April 2020, EBA postponed the Standardised Approach (SA) from Q1 2021 to Q3 2021,
  - 2023 for the Internal Model Approach (IMA);
- the capital requirements for FRTB would then become mandatory at the end of 2023 at the earliest, or in 2024.

In December 2017, the Group of Central Bank Governors and Heads of Supervision (GHOS), the Basel Committee's oversight body, endorsed the regulatory reforms aiming to complete Basel 3. These new rules, which were to take effect from 2022, have been postponed to January 2023 with an overall output floor: the risk-weighted assets (RWA) will be floored to a percentage of the standard method (credit, market and operational). The output floor level will increase gradually, from 50% in 2023 to 72.5% in 2028. Nevertheless, these rules will have to be transposed into European law (CRR3/CRD6) to be applicable to the Group.

In the face of the health crisis and of its economic and financial consequences, a number of measures have been taken by the supervisory and regulatory authorities. For example, the ECB announced the immediate implementation of Article 104a of CRD5: possible fulfilment of P2R requirement *via* 56% of CET1, 19% of AT1 and 25% of Tier 2 instruments (instead of 100% of CET1 previously), but also possibility to operate below the conservation cushion (CCB), as well as the countercyclical (CCyB) and the Systemic Risk Buffer (0% in France) ones.

Besides, the European Parliament and the Council reached an agreement through the CRR "quick fix" regulation, implemented as of 30 June 2020. The most significant elements reside in the anticipation of the implementation date for the non-deduction of CET1 software, but also for the SME and "Infrastructure financing" discount factors. Regarding the leverage ratio, the implementation of the cushion (0.5% for the Group) has been postponed from 1 January 2022 to 1 January 2023 in order to be in line with the Basel 4 application date. Central bank reserves may be excluded from the exposure base (without increasing the 3% requirement) until 27 June 2021 .

At the end of 2019, the ECB confirmed the level of additional capital requirements in respect of Pillar 2 (P2R or "Pillar 2 Requirement"), effective since 1 March 2019, at 1.75% for 2020.

As part of the ECB Covid-19 specific measures, the 2020 Pillar 2 rate will remain at the same level in 2021.

Detailed information on the G-SIB requirements and other prudential information are available on the Group website, *www.societe generale.com*, under "Universal Registration Document and Pillar 3".

Throughout 2020, Societe Generale complied with the minimum ratio requirements applicable to its activities.

5.2 CAPITAL MANAGEMENT

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

- maintaining its financial solidity and respecting the Risk Appetite targets;
- preserving its financial flexibility to finance organic growth and growth through acquisitions;
- allocating adequate capital to the various businesses, according to the Group's strategic objectives;
- maintaining the Group's resilience in the event of stress scenarios;
- meeting the expectations of its various stakeholders: supervisors, debt and equity investors, rating agencies, and shareholders.

The Group determines its internal solvency targets in accordance with these objectives and regulatory thresholds.

The Group has an internal process for assessing the adequacy of its capital that measures and explains the evolution of the Group's capital ratios over time, taking into account any future regulatory constraint.

This process (ICAAP) also takes into account, in addition to future regulatory changes, any future changes in scope (asset disposals and acquisitions). The assessment of this adequacy is based on a selection of key metrics that are relevant to the Group in terms of risk and capital measurement, such as CET1, Tier 1 and Total Capital ratios. These regulatory indicators are supplemented by an assessment of the coverage of internal capital needs by available CET1 capital, thus confirming the relevance of the targets set in the risk appetite. Besides, this assessment takes into account the constraints arising from the other metrics of the risk appetite, such as rating, MREL and TLAC or leverage ratio.

All of these indicators are measured on a forward-looking basis in relation to their target on a quarterly or even monthly basis for the current year. During the preparation of the financial plan, they are also assessed on an annual basis over a five-year horizon according to two distinct scenarios, central and adverse, in order to demonstrate the resilience of the bank's business model in the face of adverse macroeconomic and financial environments. Capital adequacy is continuously monitored by the Executive Management and by the Board of Directors as part of the Group's corporate governance process and is reviewed in depth during the preparation of the multi-year financial plan. It ensures that the bank always complies with its financial target with a buffer of +200 bps to the "Maximum Distributable Amount" (MDA) threshold.

Besides, the Group maintains a balanced capital allocation among its three strategic core businesses:

- French Retail Banking;
- International Retail Banking and Financial Services;
- Global Banking and Investor Solutions.

Each of the Group's core businesses accounts for around a third of total Risk-Weighted Assets (RWA), with a predominance of French and International Retail Banking (62% of total business RWA) and credit risk (82% of total Group RWA).

As at 31 December 2020, Group RWA were up 2% to EUR 352 billion, compared with EUR 345 billion at end December 2019.

The evolution of the business lines' RWA is at the heart of the operational management of the Group's capital trajectory based on a detailed understanding of the vectors of variations. Where appropriate, the General Management may decide, upon a proposal from the Finance Division, to implement managerial actions to increase or reduce the share of the business lines, for instance by validating the execution of synthetic securitisation or of disposals of performing or non-performing portfolios.

5.3 SCOPE OF APPLICATION – PRUDENTIAL SCOPE

The Group's prudential reporting scope includes all fully consolidated entities, with the exception of insurance entities, which are subject to separate capital supervision.

All regulated entities of the Group comply with their prudential commitments on an individual basis.

Non-regulated entities outside of the scope of prudential consolidation are subject to periodic reviews, at least annually.

The following table provides the main differences between the accounting scope (consolidated Group) and the prudential scope (Banking Regulation requirements).

TABLE 6: DIFFERENCE BETWEEN ACCOUNTING SCOPE AND PRUDENTIAL REPORTING SCOPE

Type of entity	Accounting treatment	Prudential treatment under CRR/CRD4
Entities with a finance activity	Full consolidation	Full consolidation
Entities with an Insurance activity	Full consolidation	Equity method
Holdings with a finance activity by nature	Equity method	Equity method
Joint ventures with a finance activity by nature	Equity method	Proportional consolidation

The following table provides a reconciliation between the consolidated balance sheet and the accounting balance sheet within the prudential scope. The amounts presented are accounting data, not a measure of RWA, EAD or prudential capital. Prudential filters related to entities and holdings not associated with an insurance activity are grouped together on account of their non-material weight (< 0.2%).

Return on assets (*i.e.* net income divided by the balance sheet total as per the consolidated financial statements) for Societe Generale stood at -0.02% in 2020 and 0.24% in 2019. On a prudential basis, this ratio was -0.02% in 2020 and 0.27% in 2019, calculated by dividing the Group net income by the balance sheet total for prudential purposes (data in the table below).

TABLE 7: RECONCILIATION BETWEEN THE CONSOLIDATED BALANCE SHEET AND THE PRUDENTIAL ACCOUNTING BALANCE SHEET

ASSETS at 31.12.2020 *(In EURm)*	Consolidated balance sheet	Prudential restatements linked to insurance[(1)]	Prudential restatements linked to consolidation methods	Accounting balance sheet within the prudential scope	Reference to table 12a page 59
Cash, due from banks	168,179	(0)	0	168,179	
Financial assets at fair value through profit or loss	429,458	10,966	(0)	440,424	
Hedging derivatives	20,667	22	-	20,689	
Financial assets at fair value through other comprehensive income	52,060	(0)	-	52,060	
Securities at amortised cost	15,635	(0)	-	15,635	
Due from banks at amortised cost	53,380	0	214	53,594	1
o.w. subordinated loans to credit institutions	*97*	*(0)*	-	*97*	
Customer loans at amortised cost	448,761	1,543	(5)	450,299	
Revaluation differences on portfilios hedged against interest rate risk	378	-	-	378	
Investment of insurance activities	166,854	(166,854)	-	-	
Tax assets	5,001	(88)	0	4,913	
o.w deferred tax assets that rely on future profitability excluding those arising from temporary differences	*1,840*	-	*(613)*	*1,227*	*2*
o.w deferred tax assets arising from temporary differences	*2,267*	-	*436*	*2,703*	
Other assets	67,341	(2,529)	50	64,862	
o.w defined-benefit pension fund assets	*52*	-	-	*52*	*3*
Non-current assets held for sale	6	-	-	6	
Investments accounted for using the equity method	100	4,668	(76)	4,692	
Tangible and intangible assets	30,088	(166)	0	29,922	
o.w intangible assets exclusive of leasing rights	*2,485*	-	*(140)*	*2,345*	*4*
Goodwill	4,044	(325)	-	3,719	4
TOTAL ASSETS	**1,461,952**	**(152,763)**	**183**	**1,309,372**	

(1) Restatement of entities excluded from the prudential scope and reconsolidation of intra-group transactions relating to these entities.

LIABILITIES at 31.12.2020 *(In EURm)*	**Consolidated balance sheet**	**Prudential restatements linked to insurance(1)**	**Prudential restatements linked to consolidation methods**	**Accounting balance sheet within the prudential scope**	**Reference to table 12a page 59**
Due to central banks	1,489	-	-	1,489	
Financial liabilities at fair value through profit or loss	390,247	2,031	-	392,278	
Hedging derivatives	12,461	10	-	12,471	
Debt securities issued	138,957	823	-	139,780	
Due to banks	135,571	(2,710)	43	132,904	
Customer deposits	456,059	1,438	(58)	457,439	
Revaluation differences on portfolios hedged against interest rate risk	7,696	-	-	7,696	
Tax liabilities	1,223	(294)	0	929	
Other Liabilities	84,937	(6,881)	198	78,254	
Non-current liabilities held for sale	-	-	-	-	
Liabilities related to insurance activities contracts	146,126	(146,126)	-	-	
Provisions	4,775	(20)	-	4,755	
Subordinated debts	15,432	40	-	15,472	
o.w redeemable subordinated notes including revaluation differences on hedging items	*15,001*	*40*	-	*15,041*	5
TOTAL DEBTS	**1,394,973**	**(151,690)**	**183**	**1,243,466**	
Subtotal Equity, Group share					6
Issued common stocks, equity instruments and capital reserves	31,628	0	-	31,628	
Retained earnings	32,076	(202)	(0)	31,874	
Net income	(258)	(0)	-	(258)	
Unrealised or deferred capital gains and losses	(1,761)	(0)	(0)	(1,762)	
Minority interests	5,295	(871)	-	4,424	7
TOTAL EQUITY	**66,979**	**(1,074)**	**(0)**	**65,905**	
TOTAL LIABILITIES	**1,461,952**	**(152,763)**	**183**	**1,309,372**	

(1) Restatement of entities excluded from the prudential scope and reconsolidation of intra-group transactions relating to these entities.

ASSETS at 31.12.2019 *(In EURm)*	**Consolidated balance sheet**	**Prudential restatements linked to insurance(1)**	**Prudential restatements linked to consolidation methods**	**Accounting balance sheet within the prudential scope**	**Reference to table 12a page 59**
Cash, due from banks	102,311	-	-	102,311	
Financial assets at fair value through profit or loss	385,739	9,499	-	395,238	
Hedging derivatives	16,837	36	-	16,873	
Financial assets at fair value through other comprehensive income	53,256	-	-	53,256	
Securities at amortised cost	12,489	-	-	12,489	
Due from banks at amortised cost	56,366	-	94	56,460	1
o.w. subordinated loans to credit institutions	*88*	-	-	*88*	
Customer loans at amortised cost	450,244	1,556	(3)	451,797	
Revaluation differences on portfilios hedged against interest rate risk	401	-	-	401	
Investment of insurance activities	164,938	(164,938)	-	-	
Tax assets	5,779	(135)	-	5,644	
o.w deferred tax assets that rely on future profitability excluding those arising from temporary differences	*2,659*	-	*(756)*	*1,903*	2
o.w deferred tax assets arising from temporary differences	*2,082*	-	*650*	*2,732*	
Other assets	68,045	(2,614)	65	65,496	
o.w defined-benefit pension fund assets	*120*	-	-	*120*	3
Non-current assets held for sale	4,507	-	-	4,507	
Investments accounted for using the equity method	112	4,501	(73)	4,540	
Tangible and intangible assets	30,652	(169)	-	30,483	
o.w intangible assets exclusive of leasing rights	*2,363*	-	*(138)*	*2,225*	4
Goodwill	4,627	(325)	-	4,302	4
TOTAL ASSETS	**1,356,303**	**(152,589)**	**83**	**1,203,797**	

(1) Restatement of entities excluded from the prudential scope and reconsolidation of intra-group transactions relating to these entities.

LIABILITIES at 31.12.2019 *(In EURm)*	Consolidated balance sheet	Prudential restatements linked to insurance [1]	Prudential restatements linked to consolidation methods	Accounting balance sheet within the prudential scope	Reference to table 12a page 59
Due to central banks	4,097	-	-	4,097	
Financial liabilities at fair value through profit or loss	364,129	3,228	(59)	367,298	
Hedging derivatives	10,212	3	-	10,215	
Debt securities issued	125,168	1,135	-	126,303	
Due to banks	107,929	(3,643)	61	104,347	
Customer deposits	418,612	1,517	(73)	420,056	
Revaluation differences on portfolios hedged against interest rate risk	6,671	-	-	6,671	
Tax liabilities	1,409	(396)	-	1,013	
Other Liabilities	85,062	(9,204)	154	76,012	
Non-current liabilities held for sale	1,333	-	-	1,333	
Liabilities related to insurance activities contracts	144,259	(144,259)	-	-	
Provisions	4,387	(14)	-	4,373	
Subordinated debts	14,465	40	-	14,505	
o.w redeemable subordinated notes including revaluation differences on hedging items	*14,032*	*42*	-	*14,074*	*5*
TOTAL DEBTS	**1,287,733**	**(151,593)**	**83**	**1,136,223**	
Subtotal Equity, Group share	63,527	(203)	-	63,324	6
Issued common stocks, equity instruments and capital reserves	31,102	-	-	31,102	
Retained earnings	29,558	(203)	-	29,355	
Net income	3,248	-	-	3,248	
Unrealised or deferred capital gains and losses	(381)	-	-	(381)	
Minority interests	5,043	(793)	-	4,250	7
TOTAL EQUITY	**68,570**	**(996)**	**-**	**67,574**	
TOTAL LIABILITIES	**1,356,303**	**(152,589)**	**83**	**1,203,797**	

(1) Restatement of entities excluded from the prudential scope and reconsolidation of intra-group transactions relating to these entities.

The main Group companies outside the prudential reporting scope are as follows:

TABLE 8: ENTITIES OUTSIDE THE PRUDENTIAL SCOPE

Company	Activity	Country
Antarius	Insurance	France
ALD RE Designated Activity Company	Insurance	Ireland
Catalyst RE International LTD	Insurance	Bermuda
Société Générale Strakhovanie Zhizni LLC	Insurance	Russia
Sogelife	Insurance	Luxembourg
SG Strakhovanie LLC	Insurance	Russia
Sogecap	Insurance	France
Komercni Pojstovna A.S.	Insurance	Czech Republic
La Marocaine Vie	Insurance	Morocco
Oradea Vie	Insurance	France
Société Générale RE SA	Insurance	Luxembourg
Sogessur	Insurance	France
Société Générale Life Insurance Broker SA	Insurance	Luxembourg
Banque Pouyanne	Bank	France

Generally, all regulated Group undertakings are subject to solvency requirements set by their respective supervisory authorities. Regulated financial entities and affiliates outside of Societe Generale's prudential consolidation scope are all in compliance with their respective solvency requirements. As a general principle, all banks should be under a double supervision, on a standalone basis and on a consolidated basis but the CRR allows, under specific conditions, waivers from the requirements on an individual basis granted by the competent authorities.

The supervisory authority accepted that some Group entities may be exempted from the application of prudential requirements on an individual basis or, where applicable, on a sub-consolidated basis. Terms and conditions of waiver of requirements granted by supervisors include a commitment to provide these subsidiaries with the Group's support to ensure their overall solvency and liquidity, as well as a commitment to ensure that they are managed prudently according to the applicable banking regulations.

The conditions for applying waivers regarding monitoring on an individual basis for a Parent Institution, as far as solvency and large exposure ratios are concerned, are defined by the CRR, which stipulates that two conditions have to be met:

- there is no significant obstacle, in law or in fact, current or anticipated, to the prompt transfer of equity capital or the rapid repayment of liabilities to the Parent Institution in a Member State;
- the risk assessment, measurement and control procedures that are useful for the purposes of supervision on a consolidated basis cover the Parent Institution in a Member State.

Accordingly, for instance, Societe Generale SA is not subject to prudential requirements on an individual basis.

Any transfer of equity or repayment of liabilities between the parent company and its entities is carried out in compliance with capital and liquidity requirements that are locally applicable.

The outline of the differences in the scopes of consolidation (entity by entity) is available on the website www.societegenerale.com, section “Universal Registration Document, Pillar 3” This information corresponds to Table LI3 of EBA Guidelines (EBA/GL/2016/11).

5.4 REGULATORY CAPITAL

Reported in accordance with International Financial Reporting Standards (IFRS), Societe Generale’s regulatory capital consists of the following components.

Common Equity Tier 1 capital

According to the applicable 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;
- minority interests limited by CRR/CRD4.

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

- estimated dividend payments;
- goodwill and intangible assets, net of associated deferred tax liabilities;
- unrealised capital gains and losses on cash flow hedging;
- income on own credit risk;
- deferred tax assets on tax loss carryforwards;
- deferred tax assets resulting from temporary differences beyond a threshold;
- assets from defined benefit pension funds, net of deferred taxes;
- any positive difference between expected losses on customer loans and receivables managed under the internal ratings-based (IRB) approach, and the sum of related value adjustments and collective impairment losses;
- expected losses on equity portfolio exposures;
- value adjustments resulting from the requirements of prudent valuation;
- securitisation exposures weighted at 1,250%, when these positions are excluded from the calculation of RWA.

Additional Tier 1 capital

According to CRR/CRD4 regulations, Additional Tier 1 capital is made up of deeply subordinated notes that are issued directly by the Bank, and have the following features:

- these instruments are perpetual and constitute unsecured, deeply subordinated obligations. They rank junior to all other obligations of the Bank, including undated and dated subordinated debt, and senior only to common stock shareholders;
- Societe Generale may elect, on a discretionary basis, not to pay the interest and coupons linked to these instruments. This compensation is paid out of distributable items;
- they include neither a step-up in compensation nor any other incentive to redeem;
- they must have a loss-absorbing capacity;
- they might be haircut or converted when in resolution or independently of a resolution measurement;
- subject to the prior approval of the European Central Bank, Societe Generale has the option to redeem these instruments at certain dates, but no earlier than five years after their issuance date.

Deductions of Additional Tier 1 capital essentially apply to the following:

- AT1 hybrid treasury shares;
- holding of AT1 hybrid shares issued by financial sector entities;
- minority interests beyond the minimum T1 requirement in the entities concerned.

Tier 2 capital

Tier 2 capital includes:

- undated deeply subordinated notes[1];
- dated subordinated notes;
- any positive difference between the sum of value adjustments and impairment losses on customer loans and receivables exposures managed under the IRB approach and expected losses, up to 0.6% of total credit RWA under the IRB approach;
- value adjustments for credit risk related to collective impairment losses on customer loans and receivables exposures managed under the standardised approach, up to 1.25% of total credit RWA.

Deductions of Tier 2 capital essentially apply to the following:

- Tier 2 hybrid treasury shares;
- holding of Tier 2 hybrid shares issued by financial sector entities;
- minority interests beyond the minimum capital requirement in the entities concerned.

All capital instruments and their features are detailed online (*www.societegenerale.com/en/measuring-our-performance/information-and-publications/registration-documents*).

TABLE 9: TOTAL AMOUNT OF DEBT INSTRUMENTS ELIGIBLE FOR TIER 1 EQUITY

Issuance Date	Currency	Issue amount *(in currency m)*	First call date	Yield before the call date and frequency	Yield after the call date and frequency	Book value (EURm) at 31.12.2020	Book value (EURm) at 31.12.2019
18.12.2013	USD	1 750 M	18.12.2023	7.875% annually	Mid Swap Rate USD 5 years + 4.979%	1,426	1,558
07.04.2014	EUR	1 000 M	07.04.2021	6.750% annually	Mid Swap Rate EUR 5 years + 5.538%	1,000	1,000
29.09.2015	USD	1 250 M	29.09.2025	8.000% annually	Mid Swap Rate USD 5 years + 5.873%	1,019	1,113
13.09.2016	USD	1 500 M	13.09.2021	7.375% annually	Mid Swap Rate USD 5 years + 6.238%	1,222	1,335
06.04.2018	USD	1250 M	06.04.2028	6.750% annually	Mid Swap Rate USD 5 years + 3.929%	1,019	1,113
04.10.2018	USD	1250 M	04.10.2023	7.375% annually	Mid Swap Rate USD 5 years + 4.302%	1,019	1,113
16.04.2019	SGD	750 M	16.04.2024	6.125% annually	Swap Offer Rate SGD 5 years + 4.207%	462	496
12.09.2019	AUD	700 M	12.09.2024	4.875% annually	Mid Swap S/Q AUD 5 years + 4.036%	440	438
18.11.2020	USD	1 500 M	18.11.2030	5.375% annually	5y U.S. Treasury Rate + 4.514%	1,222	-
TOTAL						**8,830**	**8,165**

TABLE 10: CHANGES IN DEBT INSTRUMENTS ELIGIBLE FOR SOLVENCY CAPITAL REQUIREMENTS

(In EURm)	31.12.2019	Issues	Redemptions	Prudential supervision valuation haircut	Others	31.12.2020
Debt instruments eligible for Tier 1	8,165	1,222	-	-	(557)	8,830
Debt instruments eligible for Tier 2	13,032	1,427	(266)	(1,088)	(518)	12,587
TOTAL ELIGIBLE DEBT INSTRUMENTS	**21,197**	**2,649**	**(266)**	**(1,088)**	**(1,075)**	**21,417**

Solvency ratios

The solvency ratios are set by comparing the Group's equity (Common Equity Tier 1 (CET1), Tier 1 (T1) or Total Capital (TC)) with the sum of risk-weighted credit exposures and the capital requirement multiplied by 12.5 for market and operational risks. They are expressed as a percentage of RWA and according to the split of own funds *i.e.*: Common Equity Tier 1 (CET1), Tier 1 (T1) or Total Capital (TC).

Each quarter, the ratios are calculated following the accounting closing and then compared to the supervisory requirements.

The Pillar 1 regulatory minimum capital requirement is set at 4.5% for CET1, 6% for T1 and 8% for TC. This minimum remains stable over time.

The minimum Pillar 2 requirement (P2R) is set by the supervisor following the Supervisory Review and Evaluation Process (SREP). It has been standing at 1.75% since 1 March 2019 .

(1) The undated deeply subordinated notes' remuneration will be paid from the distributable profits for the purposes of the consolidated prudential regulation.

In addition to these requirements comes the overall buffer requirement which is the sum of:

- the mean of the countercyclical buffer rates of each country, weighted by the relevant credit risk exposures in these countries. As of 1 January 2021, Societe Generale's countercyclical buffer is equal to 0.04%;
- the conservation buffer in force as of 1 January 2016 with a maximum level standing at 2.50% since 1 January 2019;
- the Group's G-SIB buffer imposed by the Financial Stability Board (FSB), which is equal to 1%.

As of 1 January 2021, taking into account the combined regulatory buffers, the phased-in CET1 ratio level that would trigger the Maximum Distributable Amount (MDA) mechanism stands at 9.02%.

TABLE 11: BREAKDOWN OF PRUDENTIAL CAPITAL REQUIREMENT FOR SOCIETE GENERALE

	01.01.2021	01.01.2020
Minimum requirement for Pillar 1	4.50%	4.50%
Minimum requirement for Pillar 2 (P2R)[1]	0.98%	1.75%
Minimum requirement for countercyclical buffer	0.04%	0.28%
Minimum requirement for conservation buffer	2.50%	2.50%
Minimum requirement for systemic buffer	1.00%	1.00%
Minimum requirement for CET1 ratio	**9.02%**	**10.03%**

(1) The ECB has decided to implement earlier the provisions adopted in article 104a of the CRD5 directive, stating that a minimum of 56% of P2R add-on has to be covered by CET1 capital (instead of 100% previously) and 75% by Tier 1 capital.

TABLE 12: REGULATORY CAPITAL AND CRR/CRD4 SOLVENCY RATIOS[1]

(In EURm)	31.12.2020	31.12.2019
Shareholders' equity (IFRS), Group share	**61,684**	**63,527**
Deeply subordinated notes	(8,830)	(9,500)
Perpetual subordinated notes	(264)	(283)
Group consolidated shareholders' equity net of deeply subordinated and perpetual subordinated notes	**52,590**	**53,744**
Non-controlling interests	4,378	3,928
Intangible assets	(1,647)	(2,214)
Goodwill	(3,710)	(4,302)
Dividends proposed (to the General Meeting) and interest expenses on deeply subordinated and perpetual subordinated notes	(557)	(102)
Deductions and regulatory adjustments	(3,764)	(5,290)
COMMON EQUITY TIER 1 CAPITAL	**47,290**	**45,764**
Deeply subordinated notes and preferred shares	8,830	8,165
Other additional Tier 1 capital	195	100
Additional Tier 1 deductions	(136)	(137)
TOTAL TIER 1 CAPITAL	**56,179**	**53,892**
Tier 2 instruments	12,587	13,032
Other Tier 2 capital	240	37
Tier 2 deductions	(1,422)	(1,915)
Total regulatory capital	**67,584**	**65,046**
TOTAL RISK-WEIGHTED ASSETS	**351,852**	**345,010**
Credit and counterparty credit risk-weighted assets	287,324	282,536
Market risk-weighted assets	15,340	14,513
Operational risk-weighted assets	49,188	47,961
Solvency ratios		
Common Equity Tier 1 ratio	13.4%	13.3%
Tier 1 ratio	16.0%	15.6%
Total capital ratio	19.2%	18.9%

(1) December 2020 ratios take into account the IFRS 9 phasing (fully-loaded CET1 ratio of 13.2%, the phasing effect being +28 bps). December 2019 figures include the restatement for 2019 dividend cancellation, in accordance with restrictions to the payment of dividends imposed by European Authorities.

The solvency ratio as at 31 December 2020 stood at 13.4% in Common Equity Tier 1 (13.3% at 31 December 2019) and 16.0% in Tier 1 (15.6% at 31 December 2019) for a total ratio of 19.2% (18.9% at 31 December 2019).

Group shareholders' equity at 31 December 2020 totalled EUR 61.7 billion (compared with EUR 63.5 billion at 31 December 2019).

After taking into account non-controlling interests and regulatory adjustments, CET1 regulatory capital was EUR 47.3 billion at 31 December 2020, *vs.* EUR 45.8 billion at 31 December 2019. The Additional Tier One deductions mainly concern authorisations to buy back own Additional Tier 1 capital instruments as well as subordinated bank and insurance loans.

TABLE 13: CET1 REGULATORY DEDUCTIONS AND ADJUSTMENTS UNDER CRR/CRD4

(In EURm)	31.12.2020	31.12.2019
Unrecognised minority interests	(2,507)	(2,094)
Deferred tax assets	(1,226)	(1,903)
Prudent Valuation Adjustment	(884)	(935)
Adjustments related to changes in the value of own liabilities	289	217
Other	564	(575)
TOTAL CET1 REGULATORY DEDUCTIONS AND ADJUSTMENTS	**(3,764)**	**(5,290)**

CRR/CRD4 prudential deductions and restatements included in the "Other" category essentially involve the following:

- any positive difference between expected losses on customer loans and receivables managed under the internal ratings-based (IRB) approach, and the sum of related value adjustments and impairment losses;
- expected losses on equity portfolio exposures;
- unrealised gains and losses on cash flow hedges;
- assets from defined benefit pension funds, net of deferred taxes;
- securitisation exposures weighted at 1,250%, when these positions are excluded from the calculation of RWA.

5.5 RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS

The Basel 3 Accord has established the rules for calculating minimum capital requirements in order to more accurately assess the risks to which banks are exposed, taking into account the risk profile of transactions *via* two approaches intended for determining RWA: a standardised approach and an advanced one based on internal methods modelling the counterparties' risk profiles.

The total amount of RWA featured in this chapter (EUR 351.9 billion) shows a EUR 0.5 billion gap compared with the amount published through the financial communication of 10 February 2021 of Societe Generale group as regards Q4 2020 and 2020 full year. This discrepancy is due to the consideration, in the present regulatory information disclosed, of the phasing related to IFRS 9 transitional arrangements.

Change in risk-weighted assets and capital requirements

TABLE 14: GROUP CAPITAL REQUIREMENTS AND RISK-WEIGHTED ASSETS (OV1)

	RWA		Minimum capital requirements	
(In EURm)	31.12.2020	31.12.2019	31.12.2020	31.12.2019
Credit risk (excluding counterparty credit risk)	**247,423**	**251,113**	**19,794**	**20,089**
o.w. standardised approach	*86,000*	*93,302*	*6,880*	*7,464*
o.w. Foundation IRB (F-IRB) approach	*4,417*	*4,725*	*353*	*378*
o.w. Advanced IRB (A-IRB) approach	*136,302*	*133,026*	*10,904*	*10,642*
o.w. equity IRB under the simple risk-weighted approach or IMA	*20,704*	*20,061*	*1,656*	*1,605*
Counterparty credit risk	**26,330**	**19,567**	**2,106**	**1,565**
o.w. risk exposure for contributions to the default fund of a CCP	*986*	*1,077*	*79*	*86*
o.w. CVA	*3,131*	*2,586*	*250*	*207*
Settlement risk	**77**	**41**	**6**	**3**
Securitisation exposures in the Banking Book (after cap)[1]	**5,486**	**3,762**	**439**	**301**
o.w. SEC-ERBA incl. IAA	*2,951*	*1,836*	*236*	*147*
o.w. SEC-IRBA	*2,233*	*1,860*	*179*	*149*
o.w. SEC-SA	*301*	*66*	*24*	*5*
o.w. 1,250% / deductions	-	-	-	-
Market risk	**15,340**	**14,513**	**1,227**	**1,161**
o.w. standardised approach	*1,728*	*1,373*	*138*	*110*
o.w. IMA	*13,612*	*13,140*	*1,089*	*1,051*
Large exposures	-	**-**	-	**-**
Operational risk	**49,188**	**47,961**	**3,935**	**3,837**
o.w. basic indicator approach	-	-	-	-
o.w. standardised approach	*2,250*	*2,470*	*180*	*198*
o.w. advanced measurement approach	*46,938*	*45,491*	*3,755*	*3,639*
Amounts below the thresholds for deduction (subject to 250% risk-weighting)	**8,008**	**8,052**	**641**	**644**
Floor adjustment	-	-	-	-
TOTAL	**351,852**	**345,010**	**28,148**	**27,601**

(1) The amounts of RWA and of capital requirements as at 31 December 2019 relating to securitisation in the Banking Book are featured in accordance with the new classification by prudential approach.

TABLE 15: RISK-WEIGHTED ASSETS (RWA) BY CORE BUSINESS AND RISK TYPE

(In EURbn)	Credit and counterparty credit	Market	Operational	Total 2020	Total 2019
French Retail Banking	94.4	0.1	4.4	98.9	97.8
International Retail Banking and Financial Services	102.3	0.1	5.6	108.0	115.3
Global Banking and Investor Solutions	79.0	15.0	31.9	125.9	117.7
Corporate Centre	11.6	0.2	7.3	19.1	14.1
Group	**287.3**	**15.3**	**49.2**	**351.9**	**345.0**

As at 31 December 2020, RWA (EUR 351.9 billion) were distributed as follows:

- credit and counterparty credit risks accounted for 82% of RWA (of which 36% for International Retail Banking and Financial Services);
- market risk accounted for 4% of RWA (of which 98% for Global Banking and Investor Solutions);
- operational risk accounted for 14% of RWA (of which 65% for Global Banking and Investor Solutions).

TABLE 16: MAIN SUBSIDIARIES' CONTRIBUTIONS TO THE GROUP'S RWA

	Crédit du Nord		Rosbank		Komerčni Banka	
(In EURm)	IRB	Standard	IRB	Standard	IRB	Standard
Credit and counterparty credit risks	**17,075**	**3,162**	**598**	**7,862**	**10,822**	**1,726**
Sovereign	0	611	536	82	65	1
Financial institutions	75	4	-	782	792	7
Corporate	9,681	787	-	3,569	6,415	1,176
Retail	5,445	1,001	-	3,051	3,348	45
Equity investments	1,687	94	62	-	201	1
Other non-credit obligation assets	-	666	-	378	-	497
Securitisation	186					
Market risk	**62**		**36**		**31**	
Operational risk	**1,110**		**1,157**		**639**	
TOTAL 2020	**21,409**		**9,652**		**13,217**	
TOTAL 2019	**21,456**		**9,562**		**13,295**	

5.6 TLAC AND MREL RATIOS

The Total Loss Absorbing Capacity (TLAC) requirement which applies to Societe Generale is 16% of RWA until 1 January 2022 and 18% of RWA thereafter, to which the conservation buffer of 2.5%, the G-SIB buffer of 1% and the countercyclical buffer must be added. As at 31 December 2020, the global TLAC requirement thus stood at 19.54% of Group RWA.

The TLAC rule also provides for a minimum ratio of 6% of the leverage exposure from 2019 before reaching 6.75% of the leverage exposure starting from January 2022.

As at 31 December 2020, Societe Generale reached a TLAC ratio of 28.6% of RWA and 9.2% of leverage exposure.

The Minimum Requirement for own funds and Eligible Liabilities (MREL) has applied to credit institutions and investment firms within the European Union since 2016.

Contrary to the TLAC ratio, the MREL is tailored to each institution and regularly revised by the resolution authority.

Throughout 2020, Societe Generale complied with the 8% (until May) and the 8.51% (after May) ratio of total own funds and eligible liabilities, as required by its resolution authority, the Single Resolution Board.

TABLE 17: CALCULATION OF THE TLAC RATIO

(In EURm)	31.12.2020
Total of regulatory Own Funds	**67,584**
o.w. Common Equity Tier 1 Capital (CET1)	*47,290*
o.w. Additional Tier 1 Capital (AT1)	*8,888*
o.w. Tier 2 Capital (T2)	*11,405*
Prudential Adjustments	**2,041**
Total of eligible Own Funds	**69,625**
Senior Non-Preferred Debts > 1 year	31,017
Deductions of self-held SNP	(60)
Total of Own Funds and eligible junior debts	**100,582**
Risk-Weighted Assets	**351,852**
Leverage Exposure	**1,178,543**
TLAC ratio on Own Funds and eligible junior debts (% of RWA)	**28.6%**
Senior Preferred Debts	8,289
Total of Own Funds and eligible debts (junior debts and senior preferred debts)	**108,871**
TLAC Ratio on Total of Own Funds and eligible debts (% of RWA)	**30.9%**
TLAC Ratio on Total of Own Funds and eligible debts (% of Leverage Exposure)	**9.2%**

As at 31 December 2020, the TLAC ratio on own funds and eligible junior debts was 28.6%.

The ratio reached 30.9% with the option of Senior Preferred Debt limited to 2.5% of RWA.

The TLAC ratio calculated as a percentage of the leverage exposure was 9.2%.

5.7 LEVERAGE RATIO

The Group calulates its leverage effect according to the CRR leverage ratio rules, as amended by the Delegated Act of 10 October 2014 and manages it according to the changes brought by CRR2 applicable from June 2021 (except those regarding G-SIBs expected to be applicable from January 2023).

Managing the leverage ratio means both calibrating the amount of Tier 1 capital (the numerator of the ratio) and controlling the Group's leverage exposure (the denominator of the ratio) to achieve the target ratio levels that the Group sets for itself. To this end, the leverage exposure of the different businesses is under the Finance Division's control.

The Group aims to maintain a consolidated leverage ratio that is significantly higher than the 3.5% minimum set in the Basel Committee's recommendations, transposed in Europe *via* CRR2, including a fraction of the systemic buffer which is applicable to the Group.

As at 31 December 2020, the leverage ratio of Societe Generale stood at 4.8%, considering a Tier 1 capital amount of EUR 56.2 billion compared with a leverage exposure of EUR 1,179 billion (versus 4.5% as at 31 December 2019, with EUR 53.9 billion and EUR 1,200 billion respectively).

Compared with 31 December 2019, the leverage exposure has decreased by EUR 22 billion. While the contribution to the leverage exposure of on-balance sheet exposures excluding derivatives and SFTs only increased by EUR 3 billion following the application of the prudential "quick fix" (a transitional provision giving the possibility to temporarily exclude from the leverage exposure some exposures - including cash and receivables - towards central banks denominated in euros), the exposures related to derivatives and SFTs decreased respectively by EUR 22 billion and by EUR 3 billion. The off-balance sheet exposure was almost stable over the year. The amounts mentioned in this paragraph can be found in table 18b, page 65 (section 5.10).

TABLE 18: LEVERAGE RATIO SUMMARY AND TRANSITION FROM PRUDENTIAL BALANCE SHEET TO LEVERAGE EXPOSURE[1]

(In EURm)	31.12.2020	31.12.2019
Tier 1 capital[2]	**56,179**	**53,892**
Total assets in prudential balance sheet[3]	**1,309,372**	**1,203,797**
Adjustments for fiduciary assets recognised on the balance sheet but excluded from the leverage ratio exposure	-	-
Adjustments for derivative financial instruments	(118,705)	(80,869)
Adjustments for securities financing transactions[4]	5,988	(3,037)
Off-balance sheet exposure (loan and guarantee commitments)	104,034	103,856
Technical and prudential adjustments (Tier 1 capital prudential deductions)	(6,866)	(10,217)
Technical and prudential adjustments (regulated saving exemption)	(17,087)	(13,268)
Technical and prudential adjustments (central banks exemption)	(98,192)	-
Leverage ratio exposure	**1,178,543**	**1,200,262**
Leverage ratio	**4.8%**	**4.5%**

(1) December 2020 ratio takes into account the IFRS 9 phasing (leverage ratio of 4.7% without phasing, the phasing effect being +8 bps). December 2019 figures include the restatement for 2019 dividend cancellation, in accordance with restrictions to the payment of dividends imposed by European Authorities.
(2) The capital overview is available in Table 12.
(3) The reconciliation between the consolidated balance sheet and the accounting balance sheet within the prudential scope is available in Table 7.
(4) Securities financing transactions: repurchase transactions, securities lending or borrowing transactions and other similar transactions.

5.8 LARGE EXPOSURES RATIO

The CRR incorporates the provisions regulating large exposures. As such, Societe Generale must not have any exposure towards a single beneficiary which exceeds 25% of the Group’s capital.

The eligible capital used to calculate the large exposure ratio is the total regulatory capital, with a limit on the amount of Tier 2 capital. The latter cannot exceed one third of Tier 1 capital.

The final rules of the Basel Committee on large exposures have been transposed in Europe *via* CRR2, applicable from June 2021. The main changes compared with CRR reside in the calculation of the regulatory limit (25%), henceforth expressed as a proportion of Tier 1 (instead of cumulated Tier 1 and Tier 2), and in the introduction of a cross-specific limit on systemic institutions (15%).

5.9 FINANCIAL CONGLOMERATE RATIO

The Societe Generale group, also identified as a “Financial conglomerate”, is subject to additional supervision from the ECB.

As at 31 December 2020, Societe Generale's financial conglomerate equity covered the solvency requirements for both banking and insurance activities.

The financial conglomerate ratio as at 30 June 2020 has been modified as follows: 143%, consisting of a numerator (“Own funds of the Financial Conglomerate”) of EUR 71.3 billion and a denominator (“Regulatory requirement of the Financial Conglomerate”) of EUR 50.0 billion.

As at 31 December 2019, the financial conglomerate ratio stood at 145%, consisting of a numerator “Own funds of the Financial Conglomerate” of EUR 70.0 billion and of a denominator “Regulatory requirement of the Financial Conglomerate” of EUR 48.4 billion.

5.10 ADDITIONAL QUANTITATIVE INFORMATION ON OWN FUNDS AND CAPITAL ADEQUACY

OWN FUNDS DETAILS

TABLE 12A: REGULATORY CAPITAL AND CRR/CRD4 SOLVENCY RATIOS (DETAILS OF TABLE 12)[1]

(In EURm)	2020	2019	Cross ref. Table 7	Cross Ref. Table 12b	Cross Ref. notes
Common Equity Tier 1 capital (CET1): Instruments and reserves	**53,902**	**55,789**		**6**	
of which capital instruments and the related share premium accounts	*21,006*	*21,006*		*1*	
of which retained earnings	*7,840*	*3,616*		*2*	
of which accumulated other comprehensive income (and other reserve, to include unrealised gains and losses under the applicable accounting standards)	*24,000*	*26,188*		*3*	*1*
of which minority interests (amounts allowed in consolidated CET1)	*1,871*	*1,833*	*7*	*5*	*2*
of which independtly reviewed interim profits net of any forseeable charge or dividend	*(815)*	*3,146*	*6*	*5a*	
Common Equity Tier 1 capital (CET1): Regulatory adjustments	**(6,612)**	**(10,025)**		**28**	
of which additional value adjustments (negative amount)	*(884)*	*(935)*		*7*	
of which intangible assests (net of related tax liabilities)	*(5,357)*	*(6,516)*	*4*	*8*	*3*
of which deferred tax assets that rely on future profitability excluding those arising from temporary differences	*(1,226)*	*(1,903)*	*2*	*10*	*4*
of which fair value reserves related to gains or losses on cash flow hedges	*(210)*	*(59)*		*11*	*5*
of which negative amounts resulting from the calculation of expected loss amounts	*-*	*(164)*		*12*	
of which gains or losses on liabilities valued at fair value resulting from changes in own credit standing	*289*	*217*		*14*	*6*
of which defined-benefit pension fund assets (negative amount)	*(67)*	*(169)*	*3*	*15*	*7*
of which direct and indirect holdings by an institution of own CET1 instruments (negative amount)	*(45)*	*(37)*		*16*	
of which exposure amount of the items which qualify for a risk weight of 1250% where the institution opts for the deduction alternative	*(28)*	*(25)*		*20a*	
of which deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the condition in 38, paragraph 3 are met) (negative amount)	*-*	*0*			
of which regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	*-*	*-*		*26a*	
of which other elements of Common Equity Tier 1 capital or deductions - others	*916*	*(434)*		*26b*	
Common Equity Tier 1 capital (CET1)	**47,290**	**45,764**		**29**	
Additionnal Tier 1 (AT1) capital: Instruments	**9,025**	**8,265**		**36**	
of which capital instruments and the related share premium accounts	*8,830*	*8,165*		*30*	*8*
of which amounts of qualifying amounts referred to in Article 484, paragraph 4 and the related share premium accounts subject to phase out from AT1	*-*	*-*		*33*	*8*
of which qualifying Tier 1 capital included in consolidated AT1 (including minority interests not included in row 5) issued by subsidiaries and held by third parties	*195*	*100*	*7*	*34*	*9*

(In EURm)	2020	2019	Cross ref. Table 7	Cross Ref. Table 12b	Cross Ref. notes
Additionnal Tier 1 (AT1) capital: Regulatory adjustments	**(136)**	**(137)**		**43**	
of which direct and indirect holdings by an institution of own AT1 instruments (negative amount)	*(125)*	*(125)*		*37*	
of which direct and indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	*(11)*	*(12)*	*1*	*40*	*10*
Additional Tier 1 (AT1) capital	**8,888**	**8,128**		**44**	
Tier 1 capital (T1 = CET1 + AT1)	**56,179**	**53,892**		**45**	
Tier 2 capital (T2): Instruments and provisions	**11,405**	**11,154**		**58**	
of which capital instruments and the related share premium accounts	*12,438*	*12,808*	*5*	*46*	*11*
of which amounts of qualifying amounts referred to in Article 484, paragraph 5) and the related share premium accounts subject to phase out from T2	*149*	*224*		*47*	
of which qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	*240*	*37*	*7*	*48*	*11*
of which credit risk adjustments	*499*	*-*		*50*	
of which direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	*(150)*	*(150)*		*52*	
of which direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	*(1,771)*	*(1,765)*	*1*	*55*	
Tier 2 capital (T2)	**11,405**	**11,154**		**58**	
Total capital (TC = T1 + T2)	**67,584**	**65,046**		**59**	
Total risk-weighted assets	**351,852**	**345,010**		**60**	
Ratio Common Equity Tier 1	**13.4%**	**13.3%**		**61**	
Ratio Tier 1	**16.0%**	**15.6%**		**62**	
Ratio Total capital	**19.2%**	**18.9%**		**63**	

(1) December 2020 ratios take into account the IFRS 9 phasing (fully-loaded CET1 ratio of 13.2%, the phasing effect being +28 bps). December 2019 figures include the restatement for 2019 dividend cancellation, in accordance with restrictions to the payment of dividends imposed by European Authorities.

The regulatory own funds items are used as a starting point to describe differences between balance sheet items used to calculate own funds and regulatory own funds.

Notes

I Common Equity Tier 1 (CET1): Instruments and reserves

1. Difference due to deduction for holdings of own CET1 instruments;

2. Difference linked to a limited recognition of minority interests.

II Common Equity Tier 1: Regulatory adjustments

3. Other comprehensive income from changes in the fair value through equity of financial assets are not deducted from regulatory own funds, except gains and losses on derivatives held as cash flow hedges;

4. The differences between the amounts of the balance sheet under the prudential scope and under regulatory capital are related to taxes deferred on OCA and DVA;

5. Goodwill and other intangible assets net of related deferred tax liabilities are fully deducted from regulatory own funds;

6. Gains or losses on liabilities valued at fair value and recognised in the income statement resulting from changes in own credit spread (OCA) as well as gains or losses resulting from changes in credit spread on own liability derivatives (DVA) are deducted from Common Equity Tier 1 instruments.

III Additional Tier 1 (AT1) capital: Instruments

7. Differences between balance sheet items used to calculate own funds and regulatory own funds are referring to the translation differences associated with these instruments;

8. Minority interests recognised in Additional Tier 1 instruments receive the same accounting treatment as described in Note 2.

IV Additional Tier 1 (AT1) capital: Regulatory adjustments

9. Discrepancy due to the exclusion of insurance subordinated loans in the consolidated balance sheet.

V Tier 2 (T2) capital: Instruments and provisions

10. Difference due to instruments ineligible to a classification as regulatory own funds;

11. Minority interests recognised in Tier 2 instruments receive the same accounting treatment as described in Note 2.

TABLE 12B: TRANSITIONAL OWN FUNDS DISCLOSURE TEMPLATE[1]

(In EURm)		31.12.2020
Ref.		**Amount at disclosure**
COMMON EQUITY TIER 1 (CET1) CAPITAL: INSTRUMENTS AND RESERVES		
1	Capital instruments and the related share premium accounts	21,006
2	Retained earnings	7,840
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	24,000
3a	Funds for general banking risk	-
4	Amount of qualifying items referred to in Article 484, paragraph 3 and the related share premium accounts subject to phase out from CET1	-
	Public sector capital injections grandfathered until 1 January 2018	-
5	Minority interests (amount allowed in consolidated CET1)	1,871
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	-
6	**COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS**	**54,717**
COMMON EQUITY TIER 1 (CET1) CAPITAL: REGULATORY ADJUSTMENTS		
7	Additional value adjustments (negative amount)	(884)
8	Intangible assets (net of related tax liability) (negative amount)	(5,357)
9		
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38, paragraph 3 are met) (negative amount)	(1,226)
11	Fair value reserves related to gains or losses on cash flow hedges	(210)
12	Negative amounts resulting from the calculation of expected loss amounts	-
13	Any increase in equity that results from securitised assets (negative amount)	-
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	289
15	Defined-benefit pension fund assets (negative amount)	(67)
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(45)
17	Holdings of the CET1 instruments of financial sector entities where + those entities have reciprocal cross holdings with the institutions designed to inflate artificially the own funds of the institution (negative amount)	-
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	0
20		
20a	Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative	(28)
20b	*of which: qualifying holdings outside the financial sector (negative amount)*	-
20c	*of which: securitisation positions (negative amount)*	*(28)*
20d	*of which: free deliveries (negative amount)*	-
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in 38, paragraph 3 are met) (negative amount)	-
22	Amount exceeding the 15% threshold (negative amount)	-
23	*of which: 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*	*499*
24		
25	*of which: deferred tax assets arsing from temporary differences*	*2,702*
25a	Losses for the current financial year (negative amount)	(815)
25b	Foreseeable tax charges relating to CET1 items (negative amount)	-
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	916
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	-
	of which: … filter for unrealised loss 1	-
	of which: … filter for unrealised loss 2	-
	of which: … filter for unrealised gain 1	-
	of which: … filter for unrealised gain 2	-
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	916
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution	-
28	**Total regulatory adjustment to Common Equity Tier 1 (CET1)**	**(7,427)**
29	**COMMON EQUITY TIER 1 (CET1) CAPITAL**	**47,290**

(In EURm)

Ref.		31.12.2020 Amount at disclosure
ADDITIONAL TIER 1 (AT1) CAPITAL: INSTRUMENTS		
30	Capital instruments and the related share premium accounts	8,830
31	*of which: classified as equity under applicable accounting standards*	*8,830*
32	*of which: classified as liabilities under applicable accounting standards*	-
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1 Public sector capital injections grandfathered until 1 January 2018	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	195
35	*of which: instruments issued by subsidiaries subject to phase out*	
36	Additional Tier 1 (AT1) capital before regulatory adjustments	9,025
ADDITIONAL TIER 1 (AT1) CAPITAL: REGULATORY ADJUSTMENTS		
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	(125)
38	Holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-
39	Direct and indirect holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	-
40	Direct and indirect holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant in those entities (amount above the 10% threshold net of eligible short positions) (negative amount)	(11)
41	Regulatory adjustments applied to AT1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (*i.e.* CRR residual amounts)	-
41a	Residual amounts deducted from AT1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013 Of which items to be detailed line by line, *e.g.* Material net interim losses, intangibles, shortfall of provisions to expected losses, etc.	-
41b	Residual amounts deducted from AT1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013 Of which items to be detailed line by line, *e.g.* Reciprocal cross holdings in Tier 2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc.	-
41c	Amount to be deducted from or added to AT1 capital with regard to additional filters and deductions required pre-CRR	-
	of which: … filter for unrealised losses	-
	of which: … filter for unrealised gains	-
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	-
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(136)**
44	**Additional Tier 1 (AT1) capital**	**8,888**
45	**TIER 1 CAPITAL (T1= CET1+AT1)**	**56,179**
TIER 2 (T2) CAPITAL: INSTRUMENTS AND PROVISIONS		
46	Capital instruments and the related share premium accounts	12,438
47	Amount of qualifying items referred to in Article 484, paragraph 5 and the related share premium account subject to phase out from T2 Public sector capital injections grandfathered until 1 January 2018	149
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	240
49	*of which: instruments issued by subsidiaries subject to phase out*	-
50	Credit risk adjustments	499
51	**TIER 2 (T2) CAPITAL BEFORE REGULATORY ADJUSTMENTS**	**13,326**
TIER 2 (T2) CAPITAL: REGULATORY ADJUSTMENTS		
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(150)
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	0
54a	*of which: new holdings not subject to transitional arrangements*	
54b	*of which: holdings existing before 1 January 2013 and subject to transitional arrangements*	
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) (negative amount)	(1,771)
56	Regulatory adjustments applied to Tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (*i.e.* CRR residual amounts)	-
56a	Residual amounts deducted from Tier 2 capital with regard to deduction form Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013 Of which items to be detailed line by line, *e.g.* Material net interim losses, intangibles, shortfall of provisions to expected losses, etc.	-
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to Article 475 of Regulation (EU) No 575/2013 Of which items to be detailed line by line, *e.g.* Reciprocal cross holdings in Tier 2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc.	-
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre-CRR	-
	of which: filter for unrealised losses	
	of which: filter for unrealised gains	

(In EURm)		31.12.2020
Ref.		**Amount at disclosure**
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(1,921)**
58	**Tier 2 (T2) capital**	**11,405**
59	**TOTAL CAPITAL (TC=T1+T2)**	**67,584**
59a	Risk weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (*i.e.* CRR residual amounts)	(529)
	of which: items not deducted from CET1 (Regulation (EU) No 575/2013 residual amounts) (items to be detailed line by line, e.g. Deferred tax assets that rely on future profitability net of related tax liability, indirect holdings of own CET1, etc.)	-
	of which: items not deducted from AT1 (Regulation (EU) No 575/2013 residual amounts) (items to be detailed line by line, e.g. Reciprocal cross holdings in T2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc.)	-
	Items not deducted from T2 items (Regulation (EU) No 575/2013 residual amounts) (items to be detailed line by line, *e.g.* Indirect holdings of own T2 instruments, indirect holdings of non-significant investments in the capital of other financial sector entities, etc.)	-
60	**TOTAL RISK-WEIGHTED ASSETS**	**351,852**
CAPITAL RATIOS AND BUFFERS		
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	13.44%
62	Tier 1 (as a percentage of risk exposure amount)	15.97%
63	Total capital (as a percentage of risk exposure amount)	19.21%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92, paragraph 1 point a plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	9.02%
65	*of which: capital conservation buffer requirement*	*2.50%*
66	*of which: countercyclical buffer requirement*	*0.04%*
67	*of which: systemic risk buffer requirement*	*0.00%*
67a	*of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	*1.00%*
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	
69		
70		
71		
CAPITAL RATIOS AND BUFFERS		
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)	2,723
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)	499
74		
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38, paragraph 3 are met)	2,702
APPLICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2		
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	95,421
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the gap)	499
79	Cap for inclusion of credit risk adjustments in T2 under internal rating-based approach	182,108
CAPITAL INSTRUMENTS SUBJECT TO PHASE-OUT ARRANGEMENTS (ONLY APPLICABLE BETWEEN 1 JANUARY 2014 AND 1 JANUARY 2022)		
80	Current cap on CET1 instruments subject to phase out arrangements	-
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-
82	Current cap on AT1 instruments subject to phase out arrangements	-
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-
84	Current cap on T2 instruments subject to phase out arrangements	149
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	(115)

(1) December 2020 ratios take into account the IFRS 9 phasing (fully-loaded CET1 ratio of 13.2%, the phasing effect being +28 bps). December 2019 figures include the restatement for 2019 dividend cancellation, in accordance with restrictions to the payment of dividends imposed by European Authorities.

LEVERAGE RATIO DETAILS

TABLE 18A: SUMMARY RECONCILIATION OF ACCOUNTING ASSETS AND LEVERAGE RATIO EXPOSURES (LRSUM)

(In EURm)		31.12.2020	31.12.2019
1	Total assets as per published financial statements	1,461,952	1,356,303
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(152,580)	(152,506)
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	-	-
4	Adjustments for derivative financial instruments	(118,705)	(80,869)
5	Adjustments for securities financing transactions "SFTs"	5,988	(3,037)
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	104,034	103,856
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	-	-
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	(115,279)	(13,268)
7	Other adjustments	(6,866)	(10,217)
8	**Total leverage ratio exposure**	**1,178,543**	**1,200,262**

TABLE 18B: LEVERAGE RATIO - COMMON DISCLOSURE (LRCOM)

(In EURm)		31.12.2020	31.12.2019
ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES AND SFTS)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	969,181	867,660
2	(Asset amounts deducted in determining Tier 1 capital)	(6,866)	(10,217)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	**962,315**	**857,443**
DERIVATIVE EXPOSURES			
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	22,468	17,696
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	67,603	86,463
EU-5a	Exposure determined under Original Exposure Method	-	-
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(18,273)	(18,234)
8	(Exempted CCP leg of client-cleared trade exposures)	(16,012)	(13,712)
9	(Adjusted effective notional amount of written credit derivatives)	101,932	126,517
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(96,895)	(116,140)
11	**Total derivative exposures (sum of lines 4 to 10)**	**60,823**	**82,590**
SECURITIES FINANCING TRANSACTION EXPOSURES			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	239,598	260,561
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(89,021)	(108,670)
14	Counterparty credit risk exposure for SFT assets	16,073	17,750
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	-	-
15	Agent transaction exposures	-	-
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	-	-
16	**Total securities financing transaction exposures (sum of lines 12 to 15a)**	**166,650**	**169,641**
OTHER OFF-BALANCE SHEET EXPOSURES			
17	Off-balance sheet exposures at gross notional amount	230,540	214,380
18	(Adjustments for conversion to credit equivalent amounts)	(126,506)	(110,524)
19	**Other off-balance sheet exposures (sum of lines 17 to 18)**	**104,034**	**103,856**
EXEMPTED EXPOSURES IN ACCORDANCE WITH CRR ARTICLE 429 (7) AND (14) (ON AND OFF-BALANCE SHEET)			
EU-19a	(Exemption of intragroup exposures (solo basis) in accordance with Article 429 (7) 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))**	**(115,279)**	**(13,268)**
CAPITAL AND TOTAL EXPOSURES			
20	**Tier 1 capital**	**56,179**	**53,892**
21	**Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)**	**1,178,543**	**1,200,262**
LEVERAGE RATIO			
22	**Leverage ratio**	**4.8%**	**4.5%**
22a	**Leverage ratio (excluding the impact of any applicable temporary exemption of central bank exposures)**	**4.4%**	**4.5%**
CHOICE ON TRANSITIONAL ARRANGEMENTS AND AMOUNT OF DERECOGNISED FIDUCIARY ITEMS			
EU-23	Choice on transitional arrangements for the definition of the capital measure		Definitive decision
EU-24	Amount of derecognised fiduciary items in accordance with Article 429 (11) of Regulation (EU) NO 575/2013		-

TABLE 18C: LEVERAGE RATIO – SPLIT-UP OF ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS AND EXEMPTED EXPOSURES) (LRSPL)

(In EURm)		31.12.2020	31.12.2019
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**969,181**	**867,660**
EU-2	Trading book exposures	114,991	86,320
EU-3	Banking book exposures, of which:	854,190	781,340
EU-4	*Covered bonds*	*206*	-
EU-5	*Exposures treated as sovereigns*	*279,867*	*201,137*
EU-6	*Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns*	*14,453*	*14,754*
EU-7	*Institutions*	*48,161*	*34,524*
EU-8	*Secured by mortgages of immovable properties*	*16,447*	*15,976*
EU-9	*Retail exposures*	*195,019*	*201,637*
EU-10	*Corporate*	*190,072*	*200,365*
EU-11	*Exposures in default*	*8,338*	*15,794*
EU-12	*Other exposures (eg equity, securitisations, and other non-credit obligation assets)*	*101,627*	*97,153*

TABLE 19: NON-DEDUCTED EQUITIES IN INSURANCE UNDERTAKINGS (INS1)

(In EURm)	31.12.2020
Exposure	4,674
RWA	17,294

TABLE 20: FINANCIAL CONGLOMERATES INFORMATION ON OWN FUNDS AND CAPITAL ADEQUACY RATIO (INS2)

(In EURm)	30.06.2020
Supplementary own fund requirements of the financial conglomerate (amount)	21,328
Capital adequacy ratio of the financial conglomerate (%)	143%

COUNTERCYCLICAL BUFFER DETAILS

The countercyclical capital buffer (or CCyB) rate is defined by country. The countercyclical capital buffer requirement is calculated by averaging the countercyclical rates of each country, weighted by the exposures relevant to credit risk in those countries. The countercyclical capital buffer rate came into effect on 1 January 2016, with a transitional period that ended in 2019. In France, the authority in charge of defining the countercyclical rate applicable to exposures in France and in charge of recognising any rates applicable in other countries is the High Council for Financial Stability (HCSF). The HCSF publishes quarterly the CCyB rate for France and the rates recognised for third countries. The rate applicable to the Group is recalculated whenever a country is subject to a rate change. As a result, there is no annual rate for this cushion, but a rate applicable on a given date.

TABLE 21: GEOGRAPHICAL DISTRIBUTION OF CREDIT EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL CAPITAL BUFFER (CCYB1)

	31.12.2020												
	General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures - Exposure value for non-trading book	Total exposure value	Own fund requirements						
(In EURm)	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models			Relevant credit exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	RWA-	Own fund requirements weights	Countercyclical buffer rate(%)-
Europe	**101,936**	**381,567**	**53**	**3,850**	**21,523**	**508,929**	**17,047**	**36**	**7**	**17,090**	**213,629**	**83.5%**	
Bulgaria	1	228	-	-	-	229	7	-	-	7	92	0.0%	0.50%
Czech Republic	3,281	26,667	-	-	-	29,948	955	-	-	955	11,934	4.7%	0.50%
Denmark	508	527	-	32	-	1,067	47	0	-	47	592	0.2%	0.00%
France	41,259	258,167	7	619	14,721	314,773	10,246	9	3	10,259	128,233	50.2%	0.00%
Norway	489	967	-	76	-	1,533	50	0	-	51	633	0.2%	1.00%
Slovakia	910	217	-	3	-	1,131	69	-	-	69	859	0.3%	1.00%
Sweden	593	961	-	254	-	1,807	65	1	-	66	822	0.3%	0.00%
Ireland	243	6,142	-	52	862	7,298	124	1	1	126	1,578	0.6%	0.00%
Iceland	0	0	-	-	-	0	0	-	-	0	0	0.0%	0.00%
Lithuania	13	25	-	-	-	38	1	-	-	1	11	0.0%	0.00%
Luxembourg	1,882	11,129	-	330	369	13,711	403	2	0	405	5,063	2.0%	0.25%
United Kingdom	6,810	14,541	-	799	1,653	23,804	666	7	1	674	8,421	3.3%	0.00%
North America	**1,705**	**51,857**	**5,936**	**506**	**14,319**	**74,322**	**1,082**	**97**	**12**	**1,191**	**14,884**	**5.8%**	
Asia-Pacific	**1,021**	**19,888**	**-**	**104**	**1,938**	**22,952**	**493**	**4**	**3**	**500**	**6,251**	**2.4%**	
Hong Kong	201	863	-	111	-	1,175	29	2	-	31	386	0.2%	1.00%
Rest of the world	**19,162**	**18,763**	**-**	**230**	**148**	**38,302**	**1,669**	**5**	**0**	**1,674**	**20,929**	**8.2%**	
TOTAL	**123,824**	**472,075**	**5,988**	**4,690**	**37,928**	**644,505**	**20,291**	**142**	**23**	**20,455**	**255,693**	**100.0%**	**0.04%**

TABLE 22: COUNTERCYCLICAL CAPITAL BUFFER REQUIREMENTS (CCYB2)

(In EURm)	31.12.2020	31.12.2019
Total risk exposure amount	351,852	345,010
Institution-specific countercyclical capital buffer (rate)	0.04%	0.28%
Institution-specific countercyclical capital buffer requirement (amount)	**126**	**951**

LINK BETWEEN PRUDENTIAL BALANCE SHEET AND TYPE OF RISK

TABLE 23: DIFFERENCES BETWEEN STATUTORY AND PRUDENTIAL CONSOLIDATED BALANCE SHEETS AND ALLOCATION TO REGULATORY RISK CATEGORIES (LI1)

ASSETS at 31.12.2020 *(In EURm)*	Consolidated balance sheet (statutory scope)	Consolidated balance sheet within the prudential scope	Subject to credit risk	Subject to counterparty credit risk	Subject to the securitisation framework	Subject to market risk-	Not subject to capital requirements or subject to deduction from capital
Cash, due from banks	168,179	168,179	165,837	-	-	-	2,342
Financial assets at fair value through profit or loss	429,458	440,424	22,490	281,532	-	417,934	-
Hedging derivatives	20,667	20,689	-	20,689	-	264	-
Financial assets at fair value through other comprehensive income	52,060	52,060	51,795	-	-	265	-
Securities at amortised cost	15,635	15,635	15,592	-	-	-	43
Due from banks at amortised cost	53,380	53,594	42,192	11,264	-	11,264	138
of which subordinated loans to credit institutions	*97*	*97*	-	-	-	-	*97*
Customer loans at amortised cost	448,761	450,299	422,242	8,439	18,966	8,323	652
Revaluation differences on portfolios hedged against interest rate risk	378	378	-	-	-	-	378
Investment of insurance activities	166,854	-	-	-	-	-	-
Tax assets	5,001	4,913	3,687	-	-	-	1,227
o.w deferred tax assets that rely on future profitability excluding those arising from temporary differences	*1,840*	*1,227*	*0*	-	-	-	*1,227*
o.w deferred tax assets arising from temporary differences	*2,267*	*2,703*	*2,703*	-	-	-	-
Other assets	67,341	64,862	42,971	-	-	345	21,546
o.w defined-benefit pension fund assets	*52*	*52*	-	-	-	-	*52*
Non-current assets held for sale	6	6	6	-	-	-	-
Investments accounted for using the equity method	100	4,692	4,692	-	-	-	-
Tangible and intangible assets	30,088	29,922	28,235	-	-	-	1,687
o.w intangible assets exclusive of leasing rights	*2,485*	*2,345*	*658*	-	-	-	*1,687*
Goodwill	4,044	3,719	-	-	-	-	3,719
TOTAL ASSETS	**1,461,952**	**1,309,372**	**799,737**	**321,924**	**18,966**	**438,396**	**31,732**

LIABILITIES at 31.12.2020 *(In EURm)*	**Consolidated balance sheet (statutory scope)**	**Consolidated balance sheet within the prudential scope**	**Subject to credit risk**	**Subject to counterparty credit risk**	**Subject to the securitisation framework**	**Subject to market risk-**	**Not subject to capital requirements or subject to deduction from capital**
Due to central bank	1,489	1,489	-	-	-	-	1,489
Financial liabilities at fair value through profit or loss	390,247	392,278	-	280,935	-	338,523	53,756
Hedging derivatives	12,461	12,471	-	12,471	-	49	0
Debt securities issued	138,957	139,780	-	-	-	41,426	98,353
Due to banks	135,571	132,904	-	621	-	621	132,283
Customer deposits	456,059	457,439	-	5,536	-	5,536	451,903
Revaluation differences on portfolios hedged against interest rate risk	7,696	7,696	-	-	-	-	7,696
Tax liabilities	1,223	929	-	-	-	-	929
Other Liabilities	84,937	78,254	-	-	-	4,173	74,081
Non-current liabilities held for sale	-	-	-	-	-	-	-
Liabilities related to insurance activities contracts	146,126	-	-	-	-	-	-
Provisions	4,775	4,755	-	-	-	36	4,718
Subordinated debts	15,432	15,472	-	-	-	-	15,472
of which redeemable subordinated notes including revaluation differences on hedging items	*15,001*	*15,041*	-	-	-	-	*15,041*
TOTAL DEBTS	**1,394,973**	**1,243,466**	**-**	**299,562**	**-**	**390,364**	**840,681**
Subtotal Equity, Group share							
Issued common stocks, equity instruments and capital reserves	*31,628*	*31,628*	-	-	-	-	*31,628*
Retained earnings	*32,076*	*31,874*	-	-	-	-	*31,874*
Net income	*(258)*	*(258)*	-	-	-	-	*(258)*
Unrealised or deferred capital gains and losses	*(1,761)*	*(1,762)*	-	-	-	-	*(1,762)*
Minority interests	*5,295*	*4,424*	-	-	-	-	*4,424*
TOTAL EQUITY	**66,979**	**65,905**	**-**	**-**	**-**	**-**	**65,905**
TOTAL LIABILITIES	**1,461,952**	**1,309,372**	**-**	**299,562**	**-**	**390,364**	**906,586**

Some balance sheet items have been allocated to both "counterparty" and "market" risk categories: this is mostly the case for some derivative items at fair value through profit or loss as well as for reverse repos.

The table as at 31 December 2019 has been modified as follows, notably in order to allocate balance sheet items that do not generate risk in the prudential sense to the column entitled "Not subject to capital requirements or subject to deduction from capital":

ASSETS at 31.12.2019 *(In EURm)*	**Consolidated balance sheet (statutory scope)**	**Consolidated balance sheet within the prudential scope**	**Subject to credit risk**	**Subject to counterparty credit risk**	**Subject to the securitisation framework**	**Subject to market risk-**	**Not subject to capital requirements or subject to deduction from capital**
Cash, due from banks	102,311	102,311	99,709	-	-	-	2,602
Financial assets at fair value through profit or loss	385,739	395,238	5,555	256,863	-	389,683	-
Hedging derivatives	16,837	16,873	-	16,473	-	122	400
Financial assets at fair value through other comprehensive income	53,256	53,256	53,237	-	-	20	-
Securities at amortised cost	12,489	12,489	12,463	-	-	7	19
Due from banks at amortised cost	56,366	56,460	38,175	18,168	-	18,168	118
of which subordinated loans to credit institutions	*88*	*88*	-	-	-		*88*
Customer loans at amortised cost	450,244	451,797	419,783	19,540	11,894	19,349	579
Revaluation differences on portfilios hedged against interest rate risk	401	401	401	-	-	-	-
Investment of insurance activities	164,938	-	-	-	-	-	-
Tax assets	5,779	5,644	3,741	-	-	-	1,903
of which deferred tax assets that rely on future profitability excluding those arising from temporary differences	*2,659*	*1,903*	*0*	-	-	-	*1,903*
of which deferred tax assets arising from temporary differences	*2,082*	*2,732*	*2,732*	-	-	-	-
Other assets	68,045	65,496	41,158	-	-	3,307	21,031
of which defined-benefit pension fund assets	*120*	*120*	*0*	-	-	-	*120*
Non-current assets held for sale	4,507	4,507	4,507	-	-	-	-
Investments accounted for using the equity method	112	4,540	4,540	-	-	-	-
Tangible and intangible assets	30,652	30,483	28,258	-	-	-	2,225
of which intangible assets exclusive of leasing rights	*2,363*	*2,225*	-	-	-	-	*2,225*
Goodwill	4,627	4,302	0	-	-	-	4,302
TOTAL ASSETS	**1,356,303**	**1,203,797**	**711,527**	**311,044**	**11,894**	**430,655**	**33,179**

LIABILITIES at 31.12.2019 *(In EURm)*	**Consolidated balance sheet (statutory scope)**	**Consolidated balance sheet within the prudential scope**	**Subject to credit risk**	**Subject to counterparty credit risk**	**Subject to the securitisation framework**	**Subject to market risk**	**Not subject to capital requirements or subject to deduction from capital**
Due to central bank	4,097	4,097	-	-	-	-	4,097
Financial liabilities at fair value through profit or loss	364,129	367,298	-	237,303	-	332,540	34,758
Hedging derivatives	10,212	10,215	-	10,215	-	107	0
Debt securities issued	125,168	126,303	-	-	-	28,445	97,858
Due to banks	107,929	104,347	-	5,705	-	5,606	98,642
Customer deposits	418,612	420,056	-	8,760	-	8,394	411,296
Revaluation differences on portfolios hedged against interest rate risk	6,671	6,671	-	-	-	-	6,671
Tax liabilities	1,409	1,013	-	-	-	-	1,013
Other Liabilities	85,062	76,012	-	-	-	4,756	71,256
Non-current liabilities held for sale	1,333	1,333	-	-	-	-	1,333
Liabilities related to insurance activities contracts	144,259	-	-	-	-	-	-
Provisions	4,387	4,373	-	-	-	21	4,352
Subordinated debts	14,465	14,505	-	-	-	-	14,505
of which redeemable subordinated notes including revaluation differences on hedging items	*14,032*	*14,074*	-	-	-	-	*14,074*
TOTAL DEBTS	**1,287,733**	**1,136,223**	**-**	**261,983**	**-**	**379,869**	**745,781**
Subtotal Equity, Group share	63,527	63,324					
Issued common stocks, equity instruments and capital reserves	*31,102*	*31,102*	-	-	-	-	*31,102*
Retained earnings	*29,558*	*29,355*	-	-	-	-	*29,355*
Net income	*3,248*	*3,248*	-	-	-	-	*3,248*
Unrealised or deferred capital gains and losses	*(381)*	*(381)*	-	-	-	-	*(381)*
Minority interests	*5,043*	*4,250*	-	-	-	-	*4,250*
TOTAL EQUITY	**68,570**	**67,574**	**-**	**-**	**-**	**-**	**67,574**
TOTAL LIABILITIES	**1,356,303**	**1,203,797**	**-**	**261,983**	**-**	**379,869**	**813,355**

TABLEAU 24: MAIN SOURCES OF DIFFERENCES BETWEEN REGULATORY EXPOSURE AMOUNTS AND CARRYING AMOUNTS IN FINANCIAL STATEMENTS (LI2)

(In EURm)	Consolidated balance sheet within the prudential scope	Subject to credit risk	Subject to counterparty credit risk	Subject to the securitisation framework	Subject to market risk
Asset carrying value amount under the scope of regulatory consolidation	1,277,640	799,737	321,924	18,966	438,396
Liabilities carrying value amount under the scope of regulatory consolidation	(299,562)	-	(299,562)	-	(390,364)
TOTAL NET AMOUNT UNDER REGULATORY SCOPE OF CONSOLIDATION	**978,078**	**799,737**	**22,362**	**18,966**	**48,032**
Off-balance sheet amounts	**241,251**	**220,818**	**-**	**20,433**	
Differences in valuations	*(884)*	-	-	-	
Differences due to different netting rules	*104,133*	-	*104,133*	-	
Differences due to considerations for provisions	*7,928*	*7,928*	-	-	
Differences due to the use of Credit Risk Mitigation (CRM) techniques	*(8,469)*	*(8,469)*	-	-	
Differences due to Credit Conversion Factors (CCF)	*(123,282)*	*(123,282)*	-	-	
Differences due to securitisation with risk transfer	-	-	-	-	
Other differences	*(194,907)*	*(57,200)*	-	*(1,578)*	
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES (EAD)	**1,003,847**	**839,531**	**126,495**	**37,821**	

The table above features the various effects inducing the difference between accounting carrying values on prudential perimeter and regulatory exposures (EAD), split by type of risk.

As per BCBS recommendations relayed by the EBA in its report EBA/Rep/2020/09, total accounting carrying values correspond to those displayed in table LI1 without elements not subject to capital requirements or subject to deduction from capital.

The main factors illustrated by this table are the following ones:

- inclusion of gross off-balance sheet amounts: financing and guarantee commitments relating to credit risk as well as securitisation exposures;
- impact of the application of CCF on credit risk off-balance sheet amounts;
- reintegration of provisions associated with exposures treated under advanced approach, insofar as initial accounting carrying values are net of provisions while credit risk EAD in advanced approach is gross;
- impact on EAD treated under standardised approach of some Credit Risk Mitigation elements (cash collateral);
- prudential netting of counterparty credit risk;
- other differences: notably include the deduction of items subject to market risk that do not generate EAD.

The table as at 31 December 2019 has been modified as follows, notably taking into account the methodological change impacting table 23 (LI1), as well as some format evolutions related to the EBA's 2020/04 Implementing Technical Standards (ITS):

(In EURm)	**Consolidated balance sheet within the prudential scope**	**Subject to credit risk**	**Subject to counterparty credit risk**	**Subject to the securitisation framework**	**Subject to market risk**
Asset carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	1,170,618	711,527	311,044	11,894	430,655
Liabilities carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	(261,983)	-	(261,983)	-	(379,869)
TOTAL NET AMOUNT UNDER REGULATORY SCOPE OF CONSOLIDATION	**908,636**	**711,527**	**49,062**	**11,894**	**50,786**
Off-balance sheet amounts	**233,406**	**212,213**	**-**	**21,193**	
Differences in valuations	*(935)*	-	-	-	
Differences due to different netting rules	*72,221*	-	*72,221*	-	
Differences due to considerations for provisions	*6,991*	*6,991*	-	-	
Differences due to the use of Credit Risk Mitigation (CRM) techniques	*(9,536)*	*(9,536)*	-	-	
Differences due to Credit Conversion Factors (CCF)	*(117,835)*	*(117,835)*	-	-	
Differences due to securitisation with risk transfer	-	-	-	-	
Other differences	*(174,785)*	*(38,757)*	-	*(811)*	
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES (EAD)	**918,164**	**764,604**	**121,283**	**32,276**	

TABLE 25: COMPARISON OF OWN FUNDS AND CAPITAL AND LEVERAGE RATIOS WITH AND WITHOUT THE APPLICATION OF TRANSITIONAL ARRANGEMENTS FOR IFRS 9 (IFRS9-FL)

(In EURm)		31.12.2020	30.09.2020	30.06.2020
Available capital (amounts)				
1	Common Equity Tier 1 (CET1) capital	47,290	46,107	45,053
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	46,374	45,481	44,508
3	Tier 1 capital	56,179	54,024	53,254
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	55,263	53,398	52,708
5	Total capital	67,584	64,945	64,448
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	66,668	64,319	63,902
Risk-weighted assets (amounts)				
7	Total risk-weighted assets	351,852	351,864	360,423
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	352,380	352,330	360,749
Capital ratios				
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	13.4%	13.1%	12.5%
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	13.2%	12.9%	12.3%
11	Tier 1 (as a percentage of risk exposure amount)	16.0%	15.4%	14.8%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.7%	15.2%	14.6%
13	Total capital (as a percentage of risk exposure amount)	19.2%	18.5%	17.9%
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	18.9%	18.3%	17.7%
Leverage ratio				
15	Leverage ratio total exposure measure	1,178,543	1,197,879	1,248,204
16	Leverage ratio	4.8%	4.5%	4.3%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	4.7%	4.4%	4.2%

6

CREDIT RISK

IN BRIEF

Credit risk corresponds to the risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. This risk includes the risk linked to securitisation activities and may be further amplified by individual, country and sector concentration risk.

Credit risk RWA at end 2020

EUR 260.9bn

(Credit risk RWA at end 2019: EUR 262.9bn)

EAD calculated in IRB

(% of total credit risk):

83%

Credit risk corresponds to the risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. This risk includes the risk linked to securitisation activities, and may be further amplified by individual, country and sector concentration risk.

6.1 CREDIT RISK MONITORING AND SURVEILLANCE SYSTEM

General principles governing risk-taking

The risk approval process is based on the following main principles:

- the analysis and the validation of the files fall respectively and independently to the sector of commercial follow-up of the client and to the dedicated risk units within the risk management function. In order to guarantee a consistent approach to Group risk-taking, this commercial monitoring sector and this risk unit examine all authorisation requests relating to a given client or category of clients. This commercial monitoring sector and this risk unit must be independent of each other;
- the internal rating of counterparties is a key criterion in the granting policy. These ratings are proposed by the commercial monitoring sector and validated by the dedicated risk unit;
- for retail customers, the granting process is based on risk analysis tools (score) controlled by the risk units. Credit decisions are subject to compliance with the granting criteria previously defined in credit policies whose effectiveness is regularly evaluated;
- a system of delegation of competence, largely based on the internal rating of the counterparties, confers decision-making capacities to the risk units on the one hand and the commercial monitoring sectors on the other.

The business line assumes the burden of provisions and losses related to its credit decisions as the first line of defence. The Risk Department submits recommendations to CORISQ on the evolution of the granting policy, with limits on credit portfolios, for the countries, geographic areas, sectors, products or types of customers presenting high concentration risks.

The monthly Risk Monitoring Report presented to CORISQ by the Risk Department comments among others on the evolution of the Group's credit portfolio and ensures compliance with the guidelines. Changes in the credit portfolio, changes in credit policy validated by CORISQ and respect for the Group's risk appetite are presented at least quarterly to the Risk Committee of the Board of Directors.

Monitoring individual concentration

Societe Generale complies with regulations governing large exposures (major regulatory risks exposure cap of 25% of equity). Moreover, the Group has set a stricter internal limit at 10% of consolidated shareholders' equity applying to any concentrated exposure on linked clients. Since 1 July 2018, the High Council for Financial Stability has imposed an exposure limit on most indebted companies established in France at a maximum level of 5% of eligible equity.

Internal systems are implemented to identify and manage the risks of individual concentrations, particularly at granting. For example, concentration thresholds, based on the internal rating, are set by CORISQ and define the governance for validating the limits on individual concentrations. Exposures to groups of clients deemed significant by the Group are reviewed by the Large Exposure Committee chaired by the General Management. As part of identifying its risks, the Group also performs loss simulations by customer type and typical of significant individual exposures that the Group may have.

The Group uses credit derivatives to reduce some exposures considered to be overly significant. Furthermore, the Group systematically seeks to mutualise risks with other banking partners by avoiding keeping an excessive share in the banking pool of large-scale companies.

Monitoring country risk

Country risk arises when an exposure (loan, security, guarantee or derivative) becomes susceptible to negative impact from changing regulatory, political, economic, social and financial conditions.

Country risk breaks down into two major categories:

- political and non-transfer risk covers the risk of non-payment resulting from either actions or measures taken by local government authorities (decision to prohibit the debtor from meeting its commitments, nationalisation, expropriation, non-convertibility, etc.), domestic events (riots, civil war, etc.) or external events (war, terrorism, etc.);
- commercial risk occurs when the credit quality of all counterparties in a given country deteriorates due to a national economic or financial crisis, independently of each counterparty's individual financial situation. This could be a macroeconomic shock (sharp slowdown in activity, systemic banking crisis, etc.), currency depreciation, or sovereign default on external debt potentially entailing other defaults.

Overall limits and/or monitoring of exposures have been established for countries based on their internal ratings and governance indicators. The supervision is strengthened depending on the level of the country's risk.

Country limits are approved annually by Risk Division (or General Management in specific situations). They can be revised downward at any time if the country's situation deteriorates or is expected to deteriorate.

All Group exposures (securities, derivatives, loans and guarantees) are taken into account by this monitoring. The Country Risk methodology determines an initial risk country and a final risk country (after any guarantee-related effects), which is supervised using country limits for each counterparty.

The procedure for placing a country on a watch list is triggered when there is a deterioration in country risk, or such a deterioration can be anticipated. During 2020, several countries were put under alert list due to difficulties encountered.

Sector monitoring

The Group regularly reviews its entire credit portfolio through analyses by business sector. To do this, it relies on industrial studies (including a one-year anticipation of sectoral risk) and on sectoral concentration analyses.

In addition, the Group periodically reviews its exposures to the portfolio segments presenting a specific risk profile, within the framework of CORISQs at Group or Business Unit level. These identified sectors or sub-portfolios are, where appropriate, subject to specific supervision through portfolio limits and specific granting criteria. The limits are monitored either at the General Management level or at the level of the Business Unit Management depending on the materiality and the level of risk of the portfolios.

As a complement, more targeted sector-based research and business portfolio analyses, may be conducted by General Management, the Risk Division or bank divisions, depending on current issues.

Portfolios specifically monitored by the Group CORISQ are among others:

- individual and professional credit portfolio (retail) in metropolitan France on the first hand and in International Retail Banking in Europe on the other hand. Other retail perimeters are covered by the Business Unit CORISQ. The Group defines in particular a risk appetite target concerning the minimum share covered by Credit Logement guarantee for real estate loans granted to individuals;
- oil and gas scope, on which the Group has defined a credit policy adapted to the different types of activity of sector players. This policy distinguishes financing guaranteed by oil reserves, project financing, short-term trade finance transactions, and takes into regional characteristics;
- commercial real estate scope, on which the Group has defined a framework for origination and monitoring of exposures and limits according to the different types of financing, geographical areas and/or activities;
- leveraged finance, on which the Group applies the ECB definition of perimeter and management approach (“Guidance on Leveraged Transactions”). The Group continues to pay a particular attention to the Leveraged Buy-Out (LBO) sub-portfolio;
- exposures on hedge funds is subject to a specific attention. The Group incurs risk on hedge funds through derivative transactions and its financing activity guaranteed by shares in funds. Risks related to hedge funds are governed by individual limits and global limits on market risks and wrong way risks;
- exposures on shadow banking are managed and monitored in accordance with the EBA guidelines published in 2015 which specifies expectations regarding the internal framework for identifying, controlling and managing identified risks. CORISQ has set a global exposure threshold for shadow banking.

Credit stress tests

With the aim of identifying, monitoring and managing credit risk, the Risk Division works with the businesses to conduct a set of specific stress tests relating to a country, subsidiary or activity. These specific stress tests combine both recurring stress tests, conducted on those portfolios identified as structurally carrying risk, and *ad hoc* stress tests, designed to recognise emerging risks. Some of these stress tests are presented to the Risk Committee and used to determine how to frame the corresponding the activities concerned.

Credit risk stress tests complement the global analysis with a more granular approach and allow fine-tuning of the identification, assessment and operational management of risk, including concentration. They project expected credit losses both on defaulted exposures and on non-defaulted exposures consistently with IFRS 9 methodology. The perimeter covered may include counterparty credit risk on market activities when relevant.

6.2 CREDIT RISK HEDGING

Guarantees and collateral

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

There are two main categories:

- personal guarantees are commitments 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 such as mortgage guarantors (*e.g.* Crédit Logement in France), monoline or multiline insurers, export credit agencies, etc. By extension, credit insurance and credit derivatives (purchase of protection) also belong to this category;
- collateral can consist of physical assets in the form of property, commodities or precious metals, as well as financial instruments such as cash, high-quality investments and securities, and also insurance policies.

Appropriate haircuts are applied to the value of collateral, reflecting its quality and liquidity.

In order to reduce its risk-taking, the Group is pursuing active management of its securities, in particular by diversifying them: physical collateral, personal guarantees and others (including CDS).

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).

The guarantors are subject to an internal rating updated at least annually. Regarding collateral, regular revaluations are made on the basis of an estimated disposal value composed of the market value of the asset and a discount. The market value corresponds to the value at which the good should be exchanged on the date of the valuation under conditions of normal competition. It is preferably obtained on the basis of comparable assets, failing this by any other method deemed relevant (example: value in use). This value is subject to haircuts depending on the quality of the collateral and the liquidity conditions.

In accordance with the requirements of European Regulation No. 575/2013 (CRR), the Group applies minimum collateralisation frequencies for all collateral held in the context of commitments granted (financial collateral, commercial real estate, residential real estate, other security interests, leasing guarantees).

Closer valuations must be carried out in the event of a significant change in the market concerned, the default or litigation of the counterparty or at the request of the risk management function.

In addition, the effectiveness of credit risk hedging policies is monitored as part of the LGD.

It is the responsibility of the risk management function to validate the operational procedures put in place by the business lines for the periodic valuation of collateral (guarantees and collateral), whether automatic valuations or on an expert opinion and whether during the credit decision for a new competition or during the annual renewal of the credit file.

The amount of guarantees and collateral is capped at the amount of outstanding loans less provisions, *i.e.* EUR 319 billion as at 31 December 2020 (compared with EUR 302 billion as at 31 December 2019), of which EUR 156 billion for retail customers and EUR 163 billion for other types of counterparties (compared with EUR 139 billion and EUR 163 billion as at 31 December 2019, respectively).

The outstanding loans covered by these guarantees and collateral correspond mainly to loans and receivables at amortised cost, which amounted to EUR 258 billion as at 31 December 2020, and to off-balance sheet commitments, which amounted to EUR 51 billion (compared with EUR 238 billion and EUR 57 billion as at 31 December 2019 respectively).

The amounts of guarantees and collateral received for performing outstanding loans (Stage 1) and under-performing loans (Stage 2) with payments past due amounted to EUR 4.3 billion as at 31 December 2020 (EUR 4.5 billion as at 31 December 2019), including EUR 1.7 billion on retail customers and EUR 2.6 billion on other types of counterparties (versus EUR 1.5 billion and EUR 3.0 billion as at 31 December 2019 respectively).

The amount of guarantees and collateral received for non-performing outstanding loans as at 31 December 2020 amounted to EUR 4.5 billion (compared with EUR 3.9 billion as at 31 December 2019), of which EUR 1.8 billion on retail customers and EUR 2.7 billion on other types of counterparties (compared with EUR 1.9 billion and EUR 2.0 billion respectively as at 31 December 2019). These amounts are capped at the amount of outstanding.

Use of credit derivatives to manage Corporate concentration risk

Within Corporate and Investment Banking, the Performance & Scarce Resources management (PSR) team is responsible for working in close cooperation with the Risk Division and the businesses to reduce excessive portfolio concentrations, react quickly to any deterioration in the creditworthiness of a particular counterparty and suggest actions improving the capital allocation.

PSR is part of the department responsible for the definition and effective deployment of the strategy, performance and scarce resources management for the credit and loan portfolio. The Group may use credit derivatives for in the management of its Corporate credit portfolio, primarily to reduce individual, sector and geographic concentrations and to implement a proactive risk and capital management approach.

Total outstanding purchases of protection through Corporate credit derivatives were stable at EUR 2.5 billion in nominal terms and a corresponding fair value of EUR 7.3 million at the end of December 2020 (compared with EUR 2.5 billion nominal value and a corresponding fair value of EUR -16 million at the end of December 2019). New operations have mainly been performed to improve capital allocation (EUR 1.9 billion) and, to a lower extent, to reduce concentration risk (EUR 0.6 billion).

Over 2020, the credit default swaps (CDS) spreads of European investment grade issues (Itraxx index) were volatile, peaking at 151 bps at the end of March followed by a downward trend (the index reached 50 bps at the end of December 2020). The overall sensitivity of the portfolio (Price Value of a Basis Point) is falling due to the reduction in the average maturity of the protections.

The majority of protection purchases (98% of outstanding amounts as at 31 December 2020) are made against European clearing houses, and all against counterparties with “Investment Grade” ratings (rating at least equal to BBB-).

Moreover, the amounts recognised as assets (EUR 1.3 billion as at 31 December 2020 *versus* EUR 2.4 billion as at 31 December 2019) and liabilities (EUR 1.4 billion as at 31 December 2020 *versus* EUR 2.0 billion as at 31 December 2019) correspond to the fair value of credit derivatives mainly held under a transaction activity.

As part of LCR stress tests, Article 30(2) of Delegated Act 2015/61 provides for a specific additional flow associated with a three-notch downgrade of the bank's rating. In this regard, the impact in terms of additional cash collateral in case of a three-notch downgrade of the Group's rating is estimated at EUR 3 billion as at 31 December 2020.

Credit insurance

The Group has been developing relationships with private insurers over the last several years in order to hedge some of its loans against commercial and political non-payment risks.

This activity is performed within a risk framework and monitoring system approved by the Group’s General Management. The system is based on an overall limit for the activity, along with sub-limits by maturity, and individual limits for each insurance counterparty, the latter being furthermore required to meet strict eligibility criteria. There is also a limit for insured transactions in Non Investment Grade countries.

6.3 NEW DEFINITION OF DEFAULT

The objective of the European Banking Authority (EBA) published Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No. 575/2013, applicable from 1 January 2021, and Regulation (EU) 2018/1845 of the European Central Bank (ECB) in relation to the threshold for assessing the materiality of credit obligations past due, applicable from 31 December 2020 at the latest, is to harmonise the definition of default across the European Union, thus contributing to improving consistency in the way EU banks apply regulatory requirements to their capital positions.

In particular, they clarify all aspects relating to the application of the definition of default, including conditions for a return to non-defaulted status (introduction of a probation period), explicit criteria for classification of restructured loans as defaulted, and the introduction of materiality thresholds (an absolute one and a relative one) to identify past-due payments as defaulted.

The Group has been applying these new provisions to identify defaulted exposures from 6 July 2020 to the entities whose capital requirements are determined using the internal ratings-based approach.

The other entities, under the standardised approach, have implemented these new provisions since 1 January 2021, date when the internal parameters used to calculate expected losses will be adjusted for the whole Group.

The preliminary assessments made by the Group show that the clarifications provided regarding the identification of defaulted loans remain consistent with the criteria used to assess whether Stage 3 exposures are doubtful according to IFRS 9 provisions on the recognition of expected credit losses (ECL). The Group considers that the changes brought about by the implementation of these new regulatory default provisions will have no material impact on its consolidated financial statements.

6.4 IMPAIRMENT

Impairment includes impairments of performing loans (Stages 1 and 2) and impairments of non-performing loans (Stage 3).

Exposures classified in stages

The classification methods are described in the accounting principles and in the specific Covid-19 paragraph of Note 3.8 to the consolidated financial statements featured in Chapter 6 of the universal Registration Document. These were adjusted in 2020 to take into account the context of health and economic crisis linked to Covid-19.

Estimation of expected credit losses

The methodology for calculating Stage 1 and 2 expected credit losses is based on the Basel framework, which served as the basis for determining the methods for setting calculation inputs (probability of default and loss given default for exposures under the A-IRB and F-IRB approaches, and the provisioning rate for exposures under the Standardised Approach).

The Group's portfolios have been segmented to ensure consistency in risk characteristics and a better correlation with both global and local macro-economic variables. This segmentation allows to deal with all the specifics of the Group. This segmentation is consistent or similar to that defined in the Basel framework in order to guarantee the uniqueness of default and credit loss.

IMPAIRMENT OF PERFORMING LOANS (STAGES 1 AND 2)

Impairment is recorded on performing loans based on estimates of 12-month expected credit losses (general case) or lifetime expected credit losses (contracts on which the credit risk has deteriorated since the loan was granted).

This impairment is calculated using assumptions on default rates and losses on default. It takes into account macro-economic forecasts or 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.

The expected credit losses were at 31 December 2019 calculated according to the probabilised average of three macroeconomic scenarios, established by the economists of the Group for all the entities of the Group. The basic and stress scenarios correspond to those used by the Group in its budget planning and its stress test exercise. As of 31 December 2020, the scenarios have been updated and reflect the current situation. In addition, to take into account the increased uncertainty, a fourth scenario has been defined, which reflects a slightly more degraded sensitivity compared to the central scenario, without being as severe as the stress.

The models used since the implementation of IFRS 9 and calibrated 40 based on historical correlations between defaults and economic variables are no longer adequate due to two specificities of the current crisis, the magnitude of the drop in GDP and the exceptional supporting measures. As a consequence, the inputs of the models have been adjusted to correspond to anticipated default increase from 2020 to 2022.

The probabilities used as of 31 December 2019 were based on past observations, spanning a 25-year period, of differences in outcome between the base scenario and the actual scenario (positive and negative differences) which corresponds at 31 December 2019 to: 74% for the central scenario, 16% for the stress scenario and 10% for the optimistic scenario. As of 31 December 2020, the weights of the stress and optimistic scenarios have been kept rather unchanged (15% on the stress scenario and 10% on the optimistic scenario). The previous weight of the central scenario of 75% is split between the central scenario (65%) and the fourth scenario called "Extended scenario" 10%.

The method is supplemented with a sector adjustment that increases or decreases expected credit loss in an effort to better anticipate defaults or recoveries in certain cyclical sectors. These sector adjustments are quarterly reviewed and updated. These adjustments concern cyclical economic sectors which have had default peaks in the past or which are particularly exposed to the current crisis and whose Group exposure exceeds a threshold determined and reviewed every year by Risk Department. Lastly, loss allowances based on expert opinion that increase or decrease expected credit loss have been retained and increased to factor in future risks which cannot be modeled (mainly legislative or regulatory changes) and in increased risks on portfolio under the simplified approach in which there is no modeled correlations between default and economic variables. These inputs are updated quarterly.

IMPAIRMENT OF NON-PERFORMING LOANS (STAGE 3)

Impairment is recorded on the counterparties concerned when 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 which may be called up. The methods for estimating credit losses were revised in 2020 to take into account the context of health and economic crisis linked to Covid-19. In particular, Note 1 to the consolidated financial statements in Chapter 6 describes the characteristics of the macroeconomic scenarios used and the specific Covid-19 paragraph of Note 3.8 to the consolidated financial statements specifies the model adjustments.

The variables and segmentations are described in the table below:

Scope		Macro-economic variables
Retail	France	French growth rate French inflation rate French unemployment rate 10Y Yield France
	Romania	Romanian growth rate Exchange rate EUR/RON Romanian unemployment rate
	Italy	Italian unemployment rate
Non retail	Financial institutions	Spread EURIBOR – EONIA swap 3 months US growth rate
	Very large enterprises	Brazilian growth rate Indian growth rate Chinese growth rate Russian growth rate Japanese growth rate US growth rate Euro zone growth rate
	Middle-market companies France	Profit margins of companies France French growth rate
	Local communities	French growth rate
	SMEs France	Profit margins of French companies French growth rate
	SMEs (excluding France)	Romanian growth rate Romanian unemployment rate Euro zone growth rate

6.5 RISK MEASUREMENT AND INTERNAL RATINGS

Since 2007, Societe Generale has been authorised by its supervisory authorities to apply, for the majority of its exposures, the internal method (IRB method, Internal Ratings-Based) to calculate the capital required for credit risk.

The rating model monitoring system is operational, in accordance with regulatory requirements, and detailed in this section "Risk measurement and internal ratings".

In accordance with the texts published by the EBA as part of the "IRB Repair" programme and following the review missions carried out by the ECB (TRIM – Targeted Review of Internal Models), the Group plans to develop its internal model system for credit risk, so as to comply strictly with these new requirements. A programme ("Haussmann") has been launched in this direction within the Group, and deals with aspects such as:

- the simplification of the architecture of the models, and the improvement of its auditability: either by *ex nihilo* development of new models based on the New Definition of Default (NDoD), and natively integrating the expectations of the EBA and ECB, or by bringing certain existing models up to standard;
- simplifying the architecture of models, and improving its auditability;
- improving the quality of data and its traceability throughout the chain;
- the review of the roles and responsibilities of the teams, particularly with regard to the construction and monitoring ("backtest") of the system;
- the review of certain IT application bricks, and their rationalisation;
- the establishment of a more complete normative base and a more closely monitored relationship with the supervisor;
- the roll-out plan towards the IRB approach and the maintenance of the standardised approach (Permanent Partial Use – PPU), in consultation with the supervisors.

The exposures subject to the standardised approach mainly concern the portfolios of retail customers and SMEs (Small and Medium Enterprises) of the International Retail Banking division. For exposures processed under the standard method excluding retail banking, the Group mainly uses external ratings from Standard & Poor's, Moody's and Fitch rating agencies and the *Banque de France*. In the event that several ratings are available for a third party, the second best rating is retained.

General framework of the internal approach

To calculate its capital requirements under the IRB approach, Societe Generale estimates the Risk-Weighted Assets (RWA) and the Expected Loss (EL) that may be incurred in light of the nature of the transaction, the quality of the counterparty (*via* internal rating) and all measures taken to mitigate risk.

Should an external rating be available, the corresponding exposure is assigned a risk weight according to the mapping tables provided in CRR (Articles 120-121-122) or more precisely to the tables published by the French supervisor ACPR (link: *https://acpr.banque-france.fr/sites/default/files/media/2020/08/07/21._notice_2020_-_version_clean_du_31.07.2020.pdf*).

TABLE 26: CREDIT RATING AGENCIES USED IN STANDARDISED APPROACH

	MOODY'S	FITCH	S&P
Sovereigns	✓	✓	✓
Institutions	✓	✓	✓
Corporates	✓	✓	✓

The calculation of RWA is based on the Basel parameters which are estimated using its internal risk measurement system:

- the Exposure at Default (EAD) value is defined as the Group's exposure in the event that the counterparty should default. The EAD includes exposures recorded on the balance sheet (loans, receivables, accrued income, market transactions, etc.), and a proportion of off-balance sheet exposures calculated using internal or regulatory Credit Conversion Factors (CCF);
- the Probability of Default (PD): the probability that a counterparty of the Bank will default within one year;
- the Loss Given Default (LGD): the ratio between the loss incurred on an exposure in the event a counterparty defaults and the amount of the exposure at the time of the default.

The estimations of these parameters are based on a quantitative evaluation system which is sometimes supplemented by expert or business judgment.

In addition, a set of procedures sets out the rules relating to ratings (scope, frequency of review, grade approval procedure, etc.) as well as those for supervision, backtesting and the validation of models. These procedures allow, among other things, to facilitate critical human judgment, an essential complement to the models for these portfolios.

The Group also takes into account:

- the impact of guarantees and credit derivatives, by substituting the PD, the LGD and the risk-weighting calculation of the guarantor for that of the obligor (the exposure is considered to be a direct exposure to the guarantor) in the event that the guarantor's risk weighting is more favourable than that of the obligor;
- collateral used as guarantees (physical or financial). This impact is taken into account *via* the LGD level.

To a very limited extent, Societe Generale also applies an IRB Foundation approach (where only the probability of default is estimated by the Bank, while the LGD and CCF parameters are determined directly by the supervisory authority) to a portfolio of specialised lending exposures, including those located in subsidiaries Franfinance Entreprises, Sogelease and Star Lease.

Moreover, the Group has authorisation from the regulator to use the IAA (internal assessment approach) method to calculate the regulatory capital requirement for ABCP (Asset-Backed Commercial Paper) securitisation.

In addition to the capital requirement calculation objectives under the AIRB method, the Group's credit risk measurement models contribute to the management of the Group's operational activities. They also constitute tools to structure, price and approve transactions and contribute to the setting of approval limits granted to business lines and the Risk function.

TABLE 27: BREAKDOWN OF EAD[1] BY BASEL APPROACH

	31.12.2020	31.12.2019
IRB	83%	81%
Standard	17%	19%
TOTAL	**100%**	**100%**

(1) Credit risk and counterparty credit risk.

TABLE 28: SCOPES OF APPLICATION OF THE IRB AND STANDARDISED APPROACHES FOR THE GROUP

	IRB approach	Standardised approach
French Retail Banking	Majority of portfolios	Some retail customer portfolios, including those of the Sogelease subsidiary
International Retail Banking and Financial Services	Subsidiaries KB (Czech Republic), CGI, Fiditalia, GEFA, SG Leasing SPA and Fraer Leasing SPA, SGEF Italy	Other subsidiaries
Global Banking and Investor Solutions	Majority of Corporate and Investment Banking portfolios Private Banking, Securities Services and Brokerage, mainly the retail portfolios of the following subsidiaries: SGBT Luxembourg, SGBT Monaco, SG Private Banking Suisse	For Private Banking, Securities Services and Brokerage, exposures granted to banks and companies, SG Hambros,
Corporate Center	Majority of portfolios	-

Credit risk measurement for wholesale clients

For Corporate (including specialised financing), Banking and Sovereign portfolios, the Group has implemented the following system:

RATING SYSTEM AND ASSOCIATED PROBABILITY OF DEFAULT

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 for over more than twenty years.

The following table presents the indicative corresponding scales of the main external credit assessment institutions and the corresponding average probabilities of default, as well as the Group's internal rating scale.

The rating assigned to a counterparty is generally proposed by a model, and possibly adjusted by a credit analyst, who then submits it for validation by the Risk Management.

The counterparty rating models are structured in particular according to the type of counterparty (companies, financial institutions, public entities, etc.), 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 companies and qualitative parameters that evaluate economic and strategic dimensions.

TABLE 29: SOCIETE GENERALE'S INTERNAL RATING SCALE AND INDICATIVE CORRESPONDING SCALES OF RATING AGENCIES

Probability of Default range	Counterparty internal rating	Indicative Equivalent Standard & Poor's	Indicative equivalent Fitch	Indicative Equivalent Moody's	Internal probability of Default (one year)
0.00 to < 0.25	1	AAA	AAA	Aaa	0.009%
	2+	AA+	AA+	Aa1	0.014%
	2	AA	AA	Aa2	0.020%
	2-	AA-	AA-	Aa3	0.026%
	3+	A+	A+	A1	0.032%
	3	A	A	A2	0.036%
	3-	A-	A-	A3	0.061%
	4+	BBB+	BBB+	Baa1	0.130%
0.25 to < 0.50	4	BBB	BBB	Baa2	0.257%
0.50 to < 0.75	4-	BBB-	BBB-	Baa3	0.501%
0.75 to < 2.50	5+	BB+	BB+	Ba1	1.100%
	5	BB	BB	Ba2	2.125%
2.50 to < 10.00	5-	BB-	BB-	Ba3	3.260%
	6+	B+	B+	B1	4.612%
	6	B	B	B2	7.761%
10.00 to < 100	6-	B-	B-	B3	11.420%
	7+	CCC+	CCC+	Caa1	14.328%
	7	CCC	CCC	Caa2	20.441%
	7-	C/CC/CCC-	CCC-	Caa3	27.247%

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 homogeneous 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.

CREDIT CONVERSION FACTOR (CCF) MODELS

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

TABLE 30: MAIN CHARACTERISTICS OF MODELS AND METHODS – WHOLESALE CLIENTS

Parameter modeled	Portfolio/ Category of Basel assets	Number of methods, models	Methodology Number of years default/loss
WHOLESALE CLIENTS			
Probability of Default (PD)	Sovereigns	1 method.	Econometric method, low default portfolio.
	Public sector entities	4 models according to geographic region.	Statistical (regression)/expert methods for the rating process, based on the combination of financial ratios and a qualitative questionnaire. Low default portfolio.
	Financial institutions	11 models according to type of counterparty: banks, insurance, funds, financial intermediaries, funds of funds.	Expert models based on a qualitative questionnaire. Low default portfolio.
	Specialised financing	3 models according to type of transaction.	Expert models based on a qualitative questionnaire. Low default portfolio.
	Large corporates	9 models according to geographic region.	Mainly statistical models (regression) for the rating process, based on the combination of financial ratios and a qualitative questionnaire. Defaults observed over a period of 8 to 10 years.
	Small- and medium-sized companies	19 models according to the size of the Company and the geographic region.	Mainly statistical models (regression) for the rating process, based on the combination of financial ratios and a qualitative questionnaire, behavioural score. Defaults observed over a period of 8 to 10 years.
Loss Given Default (LGD)	Public sector entities – Sovereigns	6 models according to type of counterparty.	Calibration based on historical data and expert judgments. Losses observed over a period of more than 10 years.
	Large corporates – Flat-rate Approach	24 models Flat-rate approach according to type of collateral.	Calibration based on historical data adjusted by expert judgments. Losses observed over a period of more than 10 years.
	Large corporates – Discount Approach	16 models Discount approach according to type of recoverable collateral.	Statistical calibration based on historical market data adjusted by expert judgments. Losses observed over a period of more than 10 years.
	Small- and medium-sized companies	15 models Flat-rate approach according to type of collateral or unsecured.	Statistical calibration based on historical data adjusted by expert judgments. Losses observed over a period of more than 10 years.
	Project financing	9 models Flat-rate approach according to project type.	Statistical calibration based on historical data adjusted by expert judgments. Losses observed over a period of more than 10 years.
	Financial institutions	5 models Flat-rate approach according to type of counterparty: banks, insurance, funds, etc. and the nature of the collateral.	Statistical calibration based on historical data adjusted by expert judgments. Losses observed over a period of more than 10 years.
	Other specific portfolios	6 models: factoring, leasing with option to purchase and other specific cases.	Statistical calibration based on historical data adjusted by expert judgments. Losses observed over a period of more than 10 years.
Credit Conversion Factor (CCF)	Large corporates	5 models: term loans with drawing period, revolving credits, Czech Corporates.	Models calibrated by segment. Defaults observed over a period of more than 10 years.
Expected Loss (EL)	Real estate transactions	2 models by slotting.	Statistical model based on expert judgments and a qualitative questionnaire. Low default portfolio.

MONITORING THE PERFORMANCE OF INTERNAL MODELS

The performance level of the entire wholesale client credit system is measured by regular backtests that compare PD, LGD and CCF estimates with actual results by portfolio, thus making it possible to measure the prudence of the risk parameters used by the IRB approach.

The results of backtests and remedial plans are presented to the Expert Committee for discussion and approval (see section "Governance of the modelling of credit risk"). These results justify the implementation of remedial plans if the system is deemed to be insufficiently prudent.

The results presented above cover the entire Group portfolios. Backtests compare the estimated probability of default (arithmetic mean weighted by debtors) with the observed results (the historical annual default rate). The historical default rate was calculated on the basis of performing exposure over the period from 2007 to 2019.

The historic default rate remains stable across all of the Basel portfolios. The estimated default probability is higher than the historical default rates for all Basel portfolios and for most of the ratings. It should be noted that new internal models are being developed on the most significant portfolios in order to comply with new regulatory requirements and to address the identified weaknesses of existing models.

TABLE 31: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL PD VALUES - WHOLESALE CLIENTS (CR9)

		31.12.2020						
				Number of obligors				
Basel Portfolio	PD Range	Weigthed average PD	Arithmetic average PD	End of previous year	End of the year	Defaulted obligors over the year	of which: new defaulted obligor in the year	Average historical annual default rate
Sovereigns	**TOTAL**	**0.1%**	**1.0%**	**729**	**621**	**-**	**-**	**0.2%**
	0.00 to < 0.15	0.0%	0.0%	529	510	-	-	0.0%
	0.15 to < 0.25	0.0%	0.0%	-	-	-	-	0.0%
	0.25 to < 0.50	0.3%	0.3%	17	15	-	-	0.0%
	0.50 to < 0.75	0.5%	0.5%	112	10	-	-	0.0%
	0.75 to < 2.50	1.7%	1.9%	20	16	-	-	0.3%
	2.50 to < 10.00	5.3%	5.2%	38	52	-	-	0.7%
	10.00 to < 100.00	11.8%	15.7%	13	18	-	-	3.3%
Institutions	**TOTAL**	**0.2%**	**0.9%**	**5,582**	**4,166**	**10**	**1**	**0.3%**
	0.00 to < 0.15	0.0%	0.1%	4,251	2,922	-	-	0.2%
	0.15 to < 0.25	0.0%	0.0%	-	-	-	-	0.0%
	0.25 to < 0.50	0.3%	0.3%	320	351	-	-	0.1%
	0.50 to < 0.75	0.5%	0.5%	274	179	-	-	0.2%
	0.75 to < 2.50	1.6%	1.6%	198	185	1	-	0.4%
	2.50 to < 10.00	3.9%	3.8%	461	447	4	-	0.8%
	10.00 to < 100.00	14.5%	15.7%	78	82	5	1	4.0%
Specialised lending	**TOTAL**	**1.4%**	**2.6%**	**2,289**	**2,339**	**28**	**4**	**2.1%**
	0.00 to < 0.15	0.1%	0.1%	214	219	-	-	0.2%
	0.15 to < 0.25	0.0%	0.0%	-	-	-	-	0.0%
	0.25 to < 0.50	0.3%	0.3%	171	146	-	-	0.1%
	0.50 to < 0.75	0.5%	0.5%	322	351	-	-	0.4%
	0.75 to < 2.50	1.5%	1.6%	871	838	11	2	1.0%
	2.50 to < 10.00	4.3%	4.4%	662	696	12	2	3.1%
	10.00 to < 100.00	14.0%	15.6%	49	89	5	-	12.1%
Large corporates	**TOTAL**	**1.1%**	**3.5%**	**37,285**	**36,592**	**493**	**57**	**1.5%**
	0.00 to < 0.15	0.1%	0.1%	7,591	7,663	1	1	0.1%
	0.15 to < 0.25	0.0%	0.0%	-	84	-	-	0.0%
	0.25 to < 0.50	0.3%	0.3%	2,412	2,152	2	-	0.2%
	0.50 to < 0.75	0.5%	0.5%	4,398	3,148	7	-	0.4%
	0.75 to < 2.50	1.5%	1.6%	7,834	7,311	37	4	1.0%
	2.50 to < 10.00	4.5%	4.3%	12,240	12,717	253	30	2.9%
	10.00 to < 100.00	14.6%	16.7%	2,810	3,517	193	22	10.3%
Small and medimum-sized companies	**TOTAL**	**3.3%**	**5.3%**	**97,833**	**97,695**	**2,752**	**420**	**3.3%**
	0.00 to < 0.15	0.1%	0.1%	3,591	3,230	1	1	0.3%
	0.15 to < 0.25	0.2%	0.2%	2,245	2,292	-	-	0.5%
	0.25 to < 0.50	0.3%	0.3%	5,740	5,903	1	-	0.5%
	0.50 to < 0.75	0.5%	0.5%	6,022	6,253	7	2	0.6%
	0.75 to < 2.50	1.6%	1.7%	21,265	22,538	128	19	1.5%
	2.50 to < 10.00	4.5%	4.5%	42,665	43,295	799	100	3.9%
	10.00 to < 100.00	16.7%	18.2%	16,305	15,853	1,817	298	14.5%

TABLE 32: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL LGD VALUES – WHOLESALE CLIENTS

	31.12.2020	
Basel portfolio	A-IRB LGD[1]	Estimated losses excluding margin of prudence
Large corporates	38%[2]	33%
Small- and medium-sized enterprises	39%	25%

(1) Senior unsecured LGD.
(2) Adjustment of the LGD Large Corporate unsecured following the TRIM Large Corporate.

The method for calculating the "Observed EAD/A-IRB EAD" ratio is being revised.

	31.12.2019	
Basel portfolio	A-IRB LGD[1]	Estimated losses excluding margin of prudence
Large corporates	34%	33%
Small- and medium-sized enterprises	39%	27%

(1) Senior unsecured LGD.

Credit risk measurements of retail clients

The Group has implemented the following system for the retail portfolio made up of individual customers, SCIs (real estate investment companies – *Sociétés civiles immobilières*) and professional customers:

RATING SYSTEM AND ASSOCIATED PROBABILITY OF DEFAULT

The modelling of the probability of default of retail client counterparties is carried out specifically by each of the Group's business lines recording its exposures using the AIRB method. The models incorporate data on the payment behaviour of counterparties. They are segmented by type of customer and distinguish between retail customers, professional customers, very small businesses and real estate investment companies (*Sociétés civiles immobilières*).

The counterparties of each segment are classified automatically, using statistical models, into homogeneous risk pools, each of which is assigned a probability of default. 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 and 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

For its off-balance sheet exposures, Societe Generale applies its estimates for revolving loans and overdrafts on current accounts held by retail and professional customers.

TABLE 33: MAIN CHARACTERISTICS OF MODELS AND METHODS USED – RETAIL CLIENTS

Parameter modeled	Portfolio/Category of Basel assets	Number of models	Methodology Number of years of default/loss
RETAIL CLIENTS			
Probability of Default (PD)	Residential real estate	8 models according to entity, type of guarantee (security, mortgage), type of counterparty: individuals or professionals/VSB, real estate investment company (SCI).	Statistical model (regression), behavioural score. Defaults observed over a period of more than 5 years.
	Other loans to individual customers	15 models according to entity and to the nature and object of the loan: personal loan, consumer loan, car loan, etc.	Statistical model (regression), behavioural score. Defaults observed over a period of more than 5 years.
	Renewable exposures	5 models according to entity and nature of the loan: overdraft on current account, revolving credit or consumer loan.	Statistical model (regression), behavioural score. Defaults observed over a period of more than 5 years.
	Professionals and very small businesses (VSB)	10 models according to entity, nature of the loan (medium- and long-term investment credits, short-term credit, car loans), and type of counterparty (individual or real estate investment company (SCI)).	Statistical model (regression or segmentation), behavioural score. Defaults observed over a period of more than 5 years.
Loss Given Default (LGD)	Residential real estate	8 models according to entity, type of guarantee (security, mortgage), and type of counterparty: individuals or professionals/VSB, real estate investment company (SCI).	Statistical model of expected recoverable flows based on the current flows. Model adjusted by expert opinions if necessary. Losses and recoverable flows observed over a period of more than 10 years.
	Other loans to individual customers	17 models according to entity and to the nature and object of the loan: personal loan, consumer loan, car loan, etc.	Statistical model of expected recoverable flows based on the current flows. Model adjusted by expert opinions if necessary. Losses and recoverable flows observed over a period of more than 10 years.
	Renewable exposures	7 models according to entity and nature of the loan: overdraft on current account, revolving credit or consumer loan.	Statistical model of expected recoverable flows based on the current flows. Model adjusted by expert opinions if necessary. Losses and recoverable flows observed over a period of more than 10 years.
	Professionals and very small businesses	12 models according to entity, nature of the loan (medium- and long-term investment credits, short-term credit, car loans), and type of counterparty (individual or real- estate investment company (SCI)).	Statistical model of expected recoverable flows based on the current flows. Model adjusted by expert opinions if necessary. Losses and recoverable flows observed over a period of more than 10 years.
Credit Conversion Factor (CCF)	Renewable exposures	12 calibrations by entity for revolving products and personal overdrafts.	Models calibrated by segment over a period of observation of defaults of more than 5 years.

MONITORING THE PERFORMANCE OF INTERNAL MODELS

The performance level of the entire retail client credit system is measured by regular backtests, 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 homogeneous 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.

The results presented above cover the entire Group portfolios. Backtests compare the estimated probability of default (arithmetic mean weighted by debtors) with the observed results (the historical annual default rate). The historical default rate has been calculated on the basis of performing exposure over the period from 2010 to 2019. Credit customers are included in accordance with the revised instructions of the EBA publication of 14 December 2016 (EBA/GL/2016/11).

While the historical default rate is relatively stable across all Basel Retail portfolios, the probability of default is falling. Indeed, the quality of the counterparties has artificially improved (migration of populations to the best risk classes) due in particular to government measures taken in the Covid context. As the risk scores are mainly based on the number of days of non-payment and the cash balance, they are impacted by: (i) the freezing of the number of days of non-payment and (ii) the artificial increase in cash balances by the payment of government guaranteed loans.

TABLE 34: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL PD VALUES – RETAIL CLIENTS* (CR9)

		31.12.2020					
				Number of obligors			
Basel Portfolio	PD Range	Weighted average PD	Arithmetic average PD	End of previous year	End of the year	Defaulted obligors over the year	o.w. new defaulted obligors over the year
Other loans to individual customers	**TOTAL**	**2.3%**	**3.3%**	**2,251,637**	**2,244,161**	**28,691**	**3.5%**
	0.00 to <0.15	0.1%	0.1%	35,560	32,577	38	0.1%
	0.15 to <0.25	0.2%	0.2%	51,916	60,107	34	0.2%
	0.25 to <0.50	0.4%	0.3%	315,192	323,955	533	0.3%
	0.50 to <0.75	0.6%	0.6%	292,979	295,384	421	0.5%
	0.75 to <2.50	1.4%	1.3%	778,052	807,936	1,578	1.0%
	2.50 to <10.00	4.2%	4.5%	564,325	537,107	8,642	3.4%
	10.00 to <100.00	24.8%	20.8%	213,613	187,096	17,445	20.1%
Real estate loans	**TOTAL**	**1.0%**	**1.0%**	**879,422**	**886,357**	**4,090**	**1.1%**
	0.00 to <0.15	0.1%	0.1%	177,758	191,287	229	0.1%
	0.15 to <0.25	0.2%	0.2%	156,527	167,621	171	0.1%
	0.25 to <0.50	0.4%	0.4%	126,577	134,514	108	0.2%
	0.50 to <0.75	0.6%	0.7%	91,921	90,214	310	0.4%
	0.75 to <2.50	1.4%	1.0%	216,647	205,754	966	0.7%
	2.50 to <10.00	4.6%	3.4%	94,859	85,704	1,065	2.7%
	10.00 to <100.00	17.4%	17.4%	15,133	11,263	1,241	15.0%
Revolving credits	**TOTAL**	**4.4%**	**2.2%**	**7,886,771**	**7,403,642**	**145,516**	**2.1%**
	0.00 to <0.15	0.1%	0.1%	2,180,209	2,213,652	1,962	0.1%
	0.15 to <0.25	0.2%	0.2%	85,387	80,756	60	0.1%
	0.25 to <0.50	0.4%	0.4%	1,570,530	1,506,560	9,540	0.4%
	0.50 to <0.75	0.6%	0.6%	158,786	154,511	367	0.4%
	0.75 to <2.50	1.5%	1.4%	1,940,736	1,753,397	23,868	1.0%
	2.50 to <10.00	4.7%	4.2%	1,446,249	1,220,024	38,493	3.6%
	10.00 to <100.00	21.6%	17.0%	504,875	474,742	71,226	15.4%
VSB and professionals	**TOTAL**	**2.8%**	**2.7%**	**823,464**	**811,861**	**19,762**	**3.8%**
	0.00 to <0.15	0.0%	0.0%	140	187	6	0.1%
	0.15 to <0.25	0.2%	0.2%	36,093	39,564	278	0.3%
	0.25 to <0.50	0.4%	0.3%	146,407	188,746	244	0.2%
	0.50 to <0.75	0.6%	0.6%	47,573	54,975	480	0.6%
	0.75 to <2.50	1.5%	1.4%	285,886	304,225	2,446	1.2%
	2.50 to <10.00	4.9%	5.2%	229,835	183,852	5,361	4.6%
	10.00 to <100.00	19.5%	18.8%	77,531	40,312	10,947	16.2%

* *Data a presented on the basis of the latest figures available as at 30 September 2020.*

TABLE 35: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL LGD AND EAD VALUES – RETAIL CLIENTS

	31.12.2020		
Basel portfolio	A-IRB LGD	Estimated losses excluding margin of prudence	Observed EAD/A-IRB EAD
Real estate loans (excl. guaranteed exposures)	18%	11%	-
Revolving credits	46%	41%	74%
Other loans to individual customers	28%	24%	-
VSB and professionals	28%	22%	79%
TOTAL GROUP RETAIL CLIENTS	**25%**	**20%**	**75%**

The changes in the portfolio “Other loans to individual customers” are explained by a change in scope.

	31.12.2019		
Basel portfolio	A-IRB LGD	Estimated losses excluding margin of prudence	Observed EAD/A-IRB EAD
Real estate loans (excl. guaranteed exposures)	18%	12%	-
Revolving credits	46%	39%	73%
Other loans to individual customers	26%	21%	-
VSB and professionals	28%	22%	76%
TOTAL GROUP RETAIL CLIENTS	**25%**	**19%**	**74%**

Governance of the modelling of credit risk

Credit own funds estimation models are subject to the global model risk management framework (see Chapter 14 “Model risk”).

The first line of defence is responsible for designing, putting into production, using and monitoring models, in compliance with model risk management governance rules throughout the model lifecycle, which includes for credit risk internal models traceability of development and implementation stages and annual backtesting. Depending on the specificities of each model family, in particular depending on the regulatory environment, the second line of defence may decide to perform the backtesting of the model family. In such case the LoD2 is responsible for defining a dedicated standard for the model family and informing the first line of defence (starting with the model owner) of the outcome of the backtesting.

The Model Risk Division, reporting directly to the Risk Division, acts as a second line of defence for all credit risk models. Independent model review teams rely, for the conduct of their missions, on principles of control of the theoretical robustness (assessment of the quality of the design and development) of the models, the conformity of the implementation and the use, the continuous follow-up of model relevance over time. The independent review process concludes with (i) a report summarizing the scope of the review, the tests performed, the results of the review, the conclusions or recommendations and with (ii) Reviewing and Approval Committees (respectively “*Comité Modèles*” and “Comité Experts” in the case of credit risk models). The model control system gives rise to recurring reports to the Risk Department within the framework of various bodies and processes (Group Model Risk Management Committee, Risk Appetite Statement/ Risk Appetite Framework, monitoring of recommendations, etc.) and annually to the General Management (CORISQ). The Model Risk Division reviews, amongst others, new models, backtesting results and any change to the credit own funds estimation models. In accordance with the Delegated Regulation (EU) No. 529/2014 of 20 May 2014 relating to the follow-up of internal models used for own funds computation, any model change to the Group’s credit risk measurement system is then subjected to two main types of notification to the competent supervisor, depending on the significant nature of the change laid down by this regulation itself:

- significant changes which are subject to a request for approval prior to their implementation;
- other changes which should be notified to the competent authorities: i) prior to their implementation: non-material changes, according to the criteria defined by the regulation, are notified to the Supervisor (ex-ante notification); barring a negative response, these may be implemented within a two months period; ii) after their implementation: these changes are notified to the competent authorities after their implementation at least once a year, through a specific report (ex-post notification).

The Internal Audit Division, as a third line of defence, is responsible for periodically assessing the overall effectiveness of the model risk management framework (relevance of the model risk governance and efficiency of second line of defence activities) and performing the independent model audit.

Climate risk – Measuring sensitivity to transition risk

Transition risk’s impact on Societe Generale Corporate clients’ credit risk has been identified as the main climate change-related risk for the Group.

In order to measure this impact, the Group is gradually implementing a Vulnerability Indicator which aims to reinforce the credit analysis on the most exposed counterparties.

The climate risk management system is further detailed in section “Climate risk management” of Chapter 5.4.2 “Positive climate action” of the 2021 Universal Registration Document.

6.6 QUANTITATIVE INFORMATION

In this section, the measurement used for credit exposures is the EAD – Exposure At Default (on- and off-balance sheet). Under the standardised approach, the EAD is calculated net of collateral and provisions.

The EAD is broken down according to the guarantor's characteristics, after taking into account the substitution effect (unless otherwise indicated).

The presentation of the data is in line with the guidelines on prudential disclosure requirements published by the European Banking Authority (EBA) in December 2016 (document EBA/GL/2016/11).

This presentation features the exposure classes as defined in the portfolios of the COREP regulatory financial statements, in relation to EBA requirements on Pillar 3.

A simplified view of credit risk exposures by exposure class is presented below.

TABLE 36: EXPOSURE CLASSES

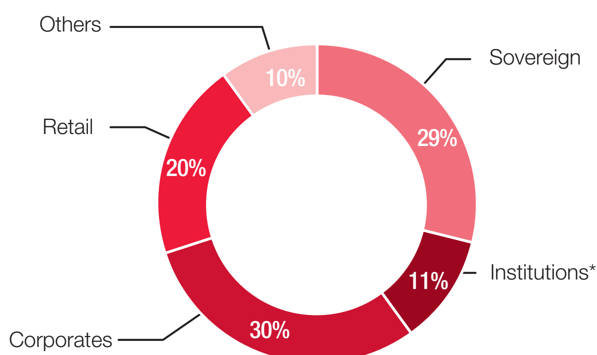
Sovereigns	Claims or contingent claims on sovereign governments, regional authorities, local authorities or public sector entities as well as on multilateral development banks and international organisations.
Institutions	Claims or contingent claims on regulated credit institutions, as well as on governments, local authorities or other public sector entities that do not qualify as sovereign counterparties.
Corporates	Claims or contingent claims on corporates, which include all exposures not covered in the portfolios defined above. In addition, small/medium-sized enterprises are included in this category as a sub-portfolio, and are defined as entities with total annual sales below EUR 50 million.
Retail	Claims or contingent claims on an individual or individuals, or on a small or medium-sized entity, provided in the latter case that the total amount owed to the credit institution does not exceed EUR 1 million. Retail exposure is further broken down into residential mortgages, revolving credit and other forms of credit to individuals, the remainder relating to exposures to very small entities and self-employed.
Others	Claims relating to securitisation transactions, equity, fixed assets, accruals, contributions to the default fund of a CCP, as well as exposures secured by mortgages on immovable property under the standardised approach, and exposures in default under the standardised approach.

Credit risk exposure (including counterparty credit risk)

As at 31 December 2020, the Group's Exposure at Default (EAD) amounted to EUR 1,004 billion.

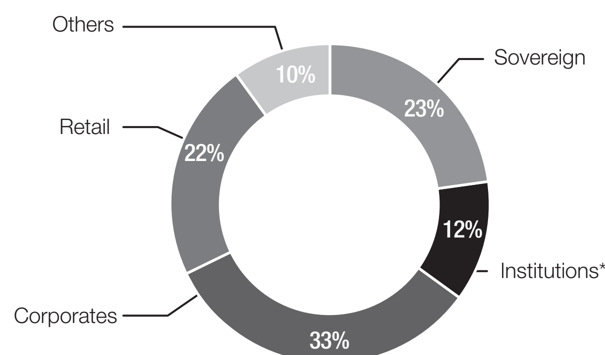
GROUP RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31 DECEMBER 2020

On- and off-balance sheet exposures (EUR 1,004 billion in EAD)



GROUP RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31 DECEMBER 2019

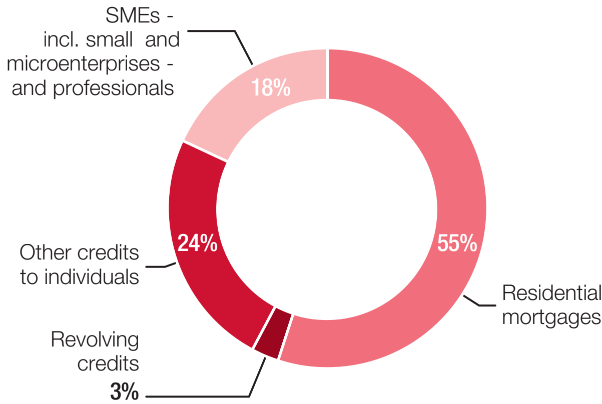
On- and off-balance sheet exposures (EUR 918 billion in EAD)



** Institutions: Basel classification bank and public sector portfolios.*

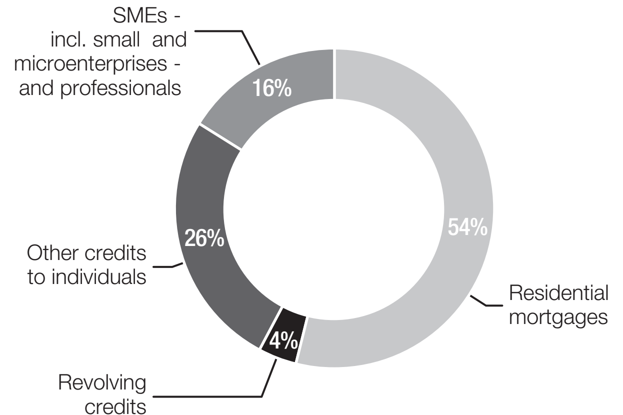
GROUP RETAIL RISK EXPOSURE BY EXPOSURE SUBCLASS (EAD) AT 31 DECEMBER 2020

On- and off-balance sheet exposures (EUR 202 billion in EAD)

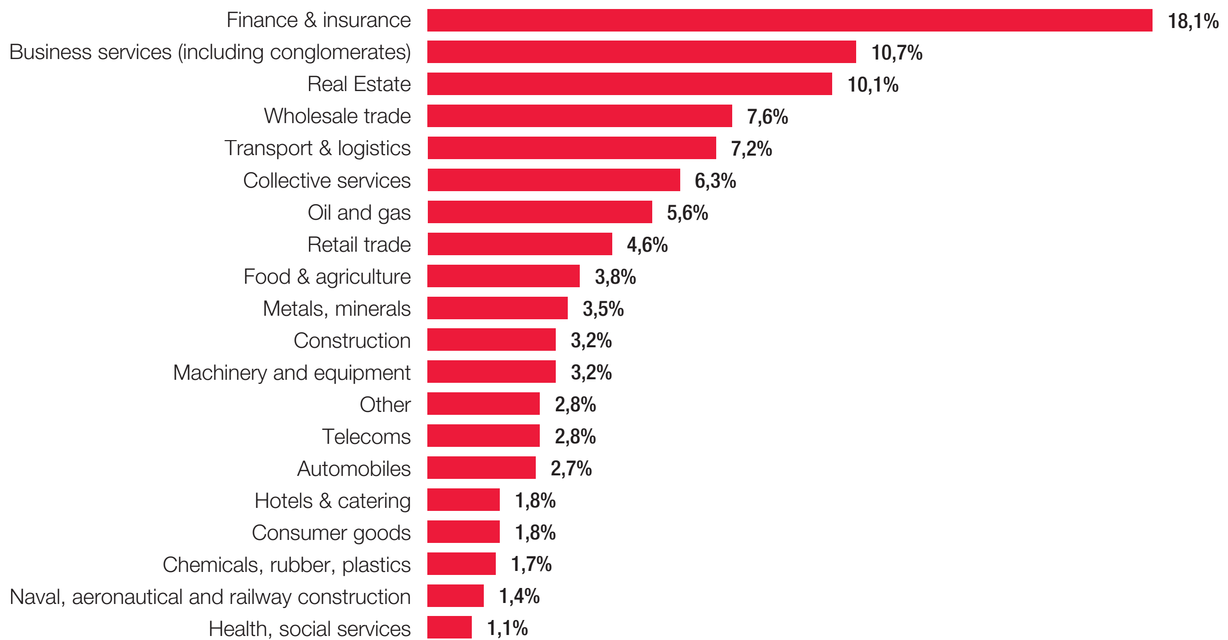


GROUP RETAIL RISK EXPOSURE BY EXPOSURE SUBCLASS (EAD) AT 31 DECEMBER 2019

On- and off-balance sheet exposures (EUR 203 billion in EAD)



SECTOR BREAKDOWN OF GROUP CORPORATE EXPOSURE (BASEL PORTFOLIO)

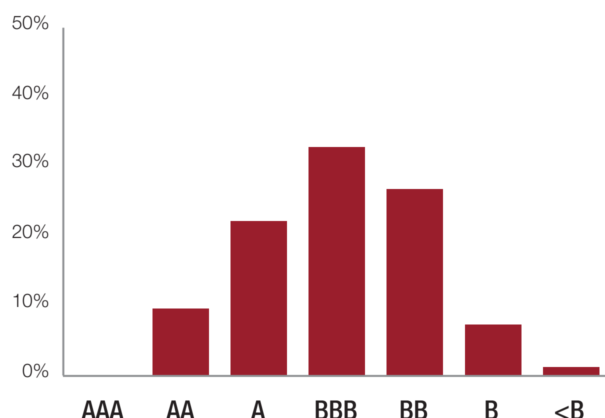


EAD of the Corporate portfolio is presented in accordance with the Basel rules (large corporates, including insurance companies, funds and hedge funds, SMEs, specialised financing, factoring businesses), based on the obligor's characteristics, before taking into account the substitution effect (credit risk scope: debtor, issuer and replacement risk).

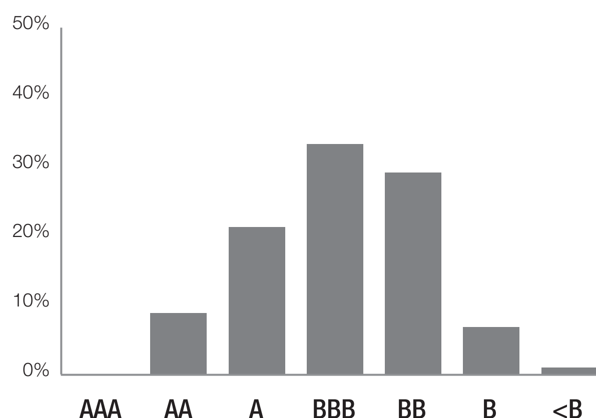
As at 31 December 2020, the Corporate portfolio amounted to EUR 339 billion (on- and off-balance sheet exposures measured in EAD). Three sectors account for more than 10% of the portfolio each (Finance and Insurance, Business services, Real Estate). The Group's exposure to its ten largest Corporate counterparties accounts for 6% of this portfolio.

Corporate and bank clients exposure

BREAKDOWN OF RISK BY INTERNAL RATING FOR CORPORATE CLIENTS AT 31 DECEMBER 2020 (AS % OF EAD)



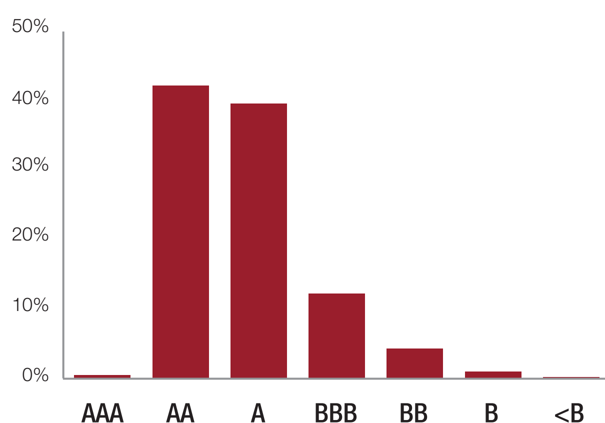
BREAKDOWN OF RISK BY INTERNAL RATING FOR CORPORATE CLIENTS AT 31 DECEMBER 2019 (AS % OF EAD)



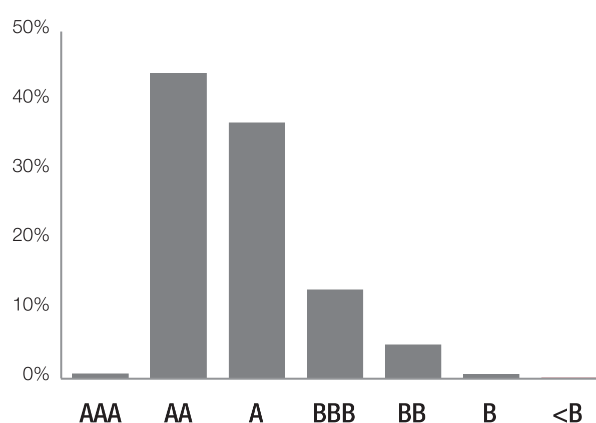
Regarding Corporate clients, the scope consists of performing loans recorded under the IRB approach (excluding prudential classification criteria, by weight, of specialised financing) over the entire Corporate clients portfolio, all divisions combined, and represents a EUR 264 billion EAD (out of a EUR 296 billion total EAD for the Corporate Basel portfolio, standardised approach included). The rating breakdown of Societe Generale Group's Corporate counterparty exposure reveals the sound quality of the portfolio. It is based on an internal counterparty rating system, displayed above as its Standard & Poor's equivalent.

As at 31 December 2020, the majority of the portfolio had an Investment Grade rating, *i.e.* counterparties with an S&P-equivalent internal rating higher than BBB- (65% of Corporate clients). Transactions with non-Investment Grade counterparties were very often backed by guarantees and collaterals in order to mitigate the risk incurred.

BREAKDOWN OF RISK BY INTERNAL RATING FOR BANKING CLIENTS AT 31 DECEMBER 2020 (AS % OF EAD)



BREAKDOWN OF RISK BY INTERNAL RATING FOR BANKING CLIENTS AT 31 DECEMBER 2019 (AS % OF EAD)

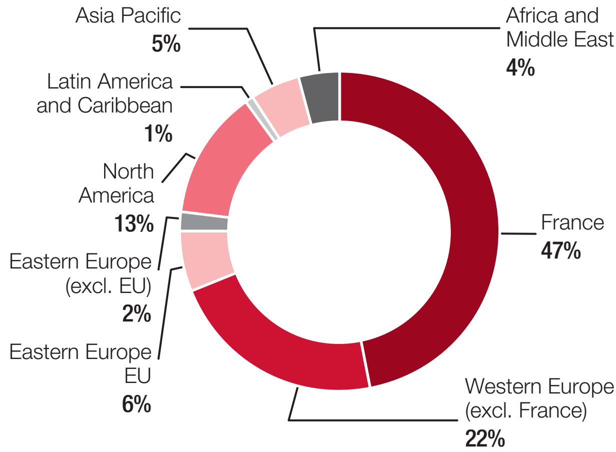


Regarding banking clients, the scope consists of performing loans recorded under the IRB approach over the entire banking clients portfolio, all divisions combined, and represents a EUR 62 billion EAD (out of a EUR 106 billion total EAD for the Bank Basel portfolio, standardised approach included). The rating breakdown of Societe Generale Group's banking counterparty exposure reveals the sound quality of the portfolio. It is based on an internal counterparty rating system, displayed above as its Standard & Poor's equivalent.

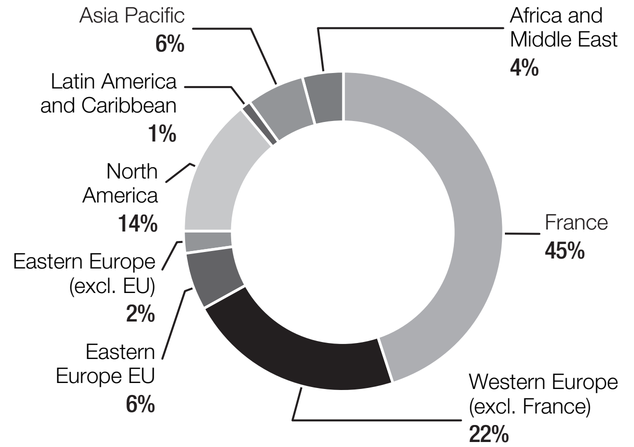
As at 31 December 2020, exposure on banking clients was concentrated on Investment Grade counterparties (95% of the exposure) and in developed countries (90%).

Geographic breakdown of Group exposure

GEOGRAPHIC BREAKDOWN OF GROUP RISK EXPOSURE AT 31 DECEMBER 2020 (ALL CLIENT TYPES INCLUDED): EUR 1,004BN

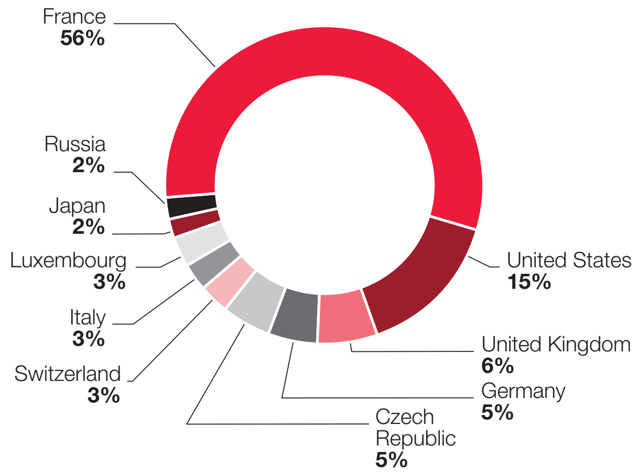


GEOGRAPHIC BREAKDOWN OF GROUP RISK EXPOSURE AT 31 DECEMBER 2019 (ALL CLIENT TYPES INCLUDED): EUR 918BN

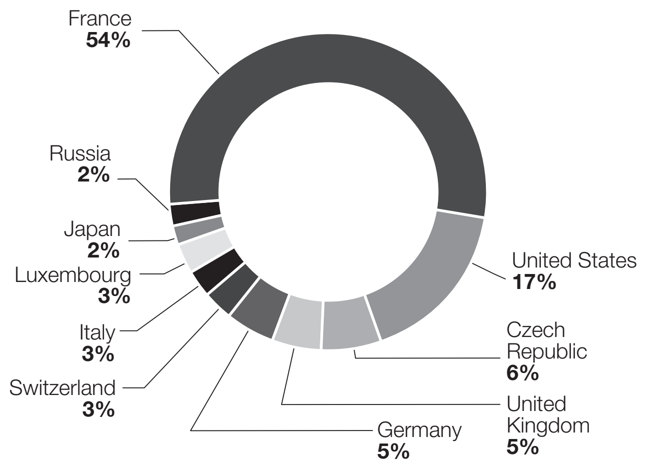


As at 31 December 2020, 90% of the Group's on- and off-balance sheet exposure was concentrated in the advanced economies.Almost half of the overall amount of outstanding loans was towards French clients (32% exposure to the non-retail portfolio and 15% to the retail one).

GEOGRAPHIC BREAKDOWN OF GROUP RISK EXPOSURE ON TOP TEN COUNTRIES AT 31 DECEMBER 2020: EUR 844BN



GEOGRAPHIC BREAKDOWN OF GROUP RISK EXPOSURE ON TOP TEN COUNTRIES AT 31 DECEMBER 2020: EUR 761BN



The Group's exposure to its top ten countries represented 84% of total exposure (*i.e.* EUR 844 billion of EAD) at 31 December 2020 (versus 83% and EUR 761 billion of EAD at 31 December 2019).

TABLE 37: BREAKDOWN OF EXPOSURES (CREDIT AND COUNTERPARTY CREDIT RISKS) ON TOP FIVE COUNTRIES BY EXPOSURE CLASS (IN %)

	France		United States		United Kingdom		Germany		Czech Republic	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Sovereign	29%	19%	31%	33%	32%	14%	19%	17%	31%	29%
Institutions	9%	9%	16%	16%	18%	27%	16%	18%	4%	4%
Corporates	22%	27%	40%	38%	33%	37%	25%	27%	29%	30%
Retail	32%	37%	0%	0%	4%	10%	21%	22%	34%	35%
Other	8%	8%	13%	13%	13%	12%	19%	16%	2%	2%

TABLE 38: GEOGRAPHICAL BREAKDOWN OF AVERAGE PD AND LGD (CREDIT AND COUNTERPARTY CREDIT RISKS)

The following table presents the average PD and LGD calculated on performing exposures (EAD) subject to the Advanced Internal Ratings-Based (AIRB) approach. The geographical areas are grouped according to their significance.

	31.12.2020											
	Sovereign			Institutions			Corporates			Retail		
(In EURm)	EAD	Average PD	Average LGD	EAD	Average PD	Average LGD	EAD	Average PD	Average LGD	EAD	Average PD	Average LGD
France	136,082	0.01%	0%	24,313	0.11%	8%	90,269	2.08%	32%	141,013	1.48%	16%
Western Europe (excl.France)	62,413	0.03%	1%	14,880	0.16%	20%	73,115	0.95%	27%	10,596	2.92%	34%
Eastern Europe	18,762	0.06%	5%	2,349	0.51%	22%	13,491	1.88%	29%	14,021	1.12%	24%
Eastern Europe (excl. UE)	2,443	0.21%	23%	595	4.09%	36%	3,025	1.65%	24%	91	0.69%	29%
North America	37,603	0.01%	0%	9,606	0.12%	17%	51,013	0.70%	27%	90	4.92%	40%
Rest of the world	25,658	0.57%	20%	10,062	0.55%	36%	28,377	1.07%	28%	883	0.88%	23%
TOTAL	**282,960**	**0.07%**	**3%**	**61,804**	**0.25%**	**17%**	**259,289**	**1.37%**	**29%**	**166,694**	**1.54%**	**18%**

	31.12.2019											
	Sovereign			Institutions			Corporates			Retail		
(In EURm)	EAD	Average PD	Average LGD	EAD	Average PD	Average LGD	EAD	Average PD	Average LGD	EAD	Average PD	Average LGD
France	73,966	0.02%	1%	22,534	0.12%	8%	89,711	1.74%	30%	137,651	1.80%	16%
Western Europe (excl.France)	44,277	0.03%	1%	14,057	0.15%	21%	67,999	1.24%	25%	12,214	2.62%	33%
Eastern Europe	16,837	0.05%	6%	2,191	0.46%	24%	13,949	1.56%	29%	13,374	1.20%	25%
Eastern Europe (excl. UE)	2,591	0.24%	25%	642	3.00%	33%	3,425	1.72%	23%	216	1.49%	25%
North America	41,439	0.00%	0%	11,303	0.06%	21%	50,401	0.67%	25%	189	3.06%	47%
Rest of the world	26,357	0.42%	20%	10,585	0.52%	32%	27,540	1.09%	25%	1,776	0.98%	21%
TOTAL	**205,466**	**0.07%**	**4%**	**61,312**	**0.23%**	**16%**	**253,025**	**1.31%**	**27%**	**165,421**	**1.80%**	**18%**

TABLE 39: EXPOSURE TREATED UNDER STANDARDISED APPROACH BY EXPOSURE CLASS AND EXTERNAL RATING (CREDIT AND COUNTERPARTY CREDIT RISKS)

The amounts are presented without default, securitisation and contributions to default funds of central counterparties.

(In EURm)

	31.12.2020		
Exposure class	**External rating**	**Exposure**	**EAD**
Sovereign			
	AAA to AA-	3,061	3,971
	A+ to A-	10	2
	BBB+ to B-	1,130	1,117
	< B-	-	4
	Without external rating	5,852	6,871
	Subtotal	**10,054**	**11,965**
Institutions			
	AAA to AA-	10,387	5,914
	A+ to A-	480	386
	BBB+ to B-	931	860
	< B-	-	-
	Without external rating	26,230	36,981
	Subtotal	**38,029**	**44,140**
Corporates			
	AAA to AA-	-	217
	A+ to A-	-	2
	BBB+ to B-	-	-
	< B-	-	-
	Without external rating	49,169	31,499
	Subtotal	**49,169**	**31,718**
Retail			
	Without external rating	47,491	30,690
Other			
	Without external rating	46,139	45,609
TOTAL		**190,882**	**164,122**

Change in risk-weighted assets (RWA) and capital requirements for credit and counterparty credit risks

TABLE 40: CHANGE IN RISK-WEIGHTED ASSETS (RWA) BY APPROACH (CREDIT AND COUNTERPARTY CREDIT RISKS)

(In EURm)	RWA - IRB	RWA - Standard	RWA - Total	Capital requirements - IRB	Capital requirements - Standard	Capital requirements - total
RWA as at end of previous reporting period (31.12.2019)	**175,359**	**104,549**	**279,908**	**14,029**	**8,364**	**22,393**
Asset size	3,542	(4,118)	(577)	283	(329)	(46)
Asset quality	3,985	700	4,685	319	56	375
Model updates	13,605	200	13,805	1,088	16	1,104
Methodology and policy	(3,830)	1,382	(2,448)	(306)	111	(196)
Acquisitions and disposals	(1,613)	(1,518)	(3,130)	(129)	(121)	(250)
Foreign exchange movements	(3,273)	(3,508)	(6,782)	(262)	(281)	(543)
Other	(367)	(979)	(1,346)	(29)	(78)	(108)
RWA as at end of reporting period (31.12.2020)	**187,407**	**96,708**	**284,115**	**14,993**	**7,737**	**22,729**

The table above presents the data without CVA (Credit Valuation Adjustment).

The main effects explaining the EUR 4.2 billion rise in RWA (excluding CVA) in 2020 are as follows:

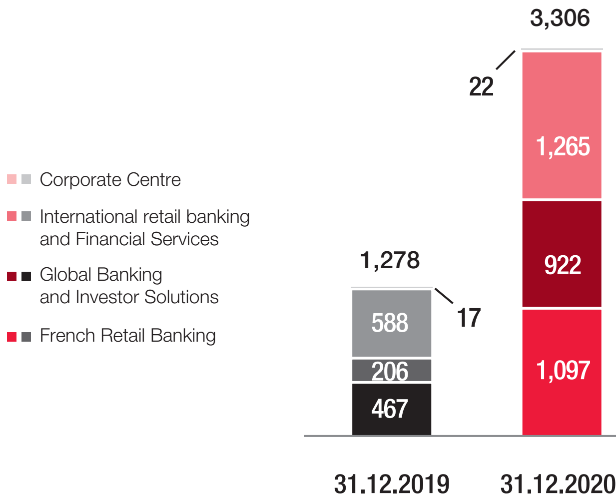
- a model effect of EUR +13.8 billion including an increase of EUR 10 billion due to TRIM ("Targeted Review of Internal Models");
- a change in the prudential scope (EUR -3.1 billion) linked with the various disposals operated in 2020, including SG Banque aux Antilles (EUR -0.4 billion) and SG Finans (EUR -2.5 billion);
- a foreign exchange effect (EUR -6.8 billion), mainly related to the depreciation of the US dollar against the euro (EUR -2.8 billion), of the Russian ruble (EUR -1.8 billion), of the Czech crown (EU -0.5 billion) and of the British pound (EUR -0.4 billion).

The effects are defined as follows:

- asset size: organic changes in book size and composition (including the creation of new business lines and maturing loans) but excluding changes due to acquisitions and disposals of entities;
- asset quality: changes in the quality of the Bank's assets due to changes in borrower risk, such as rating grade migration or similar effects;
- model updates: changes due to model implementation, changes in model scope or any changes intended to address model weaknesses;
- methodology and policy: changes due to methodological changes in calculations driven by regulatory changes, including both revisions to existing regulations and new regulations;
- acquisitions and disposals: changes in book size due to acquisitions and disposals of entities;
- foreign exchange movements: changes arising from market fluctuations, such as foreign currency translation movements;
- other: this category is used to capture changes that cannot be attributed to any other categories.

Net cost of risk

CHANGE IN GROUP NET COST OF RISK (IN EURM)



The **Group's net cost of risk** in 2020 was - EUR 3,306 million, up to +159% compared to 2019. This cost of risk is therefore up sharply *vs.* 2019 due to the increase in stage 1/stage 2 following the deterioration of the economic outlook and, to a lesser extent, the increase in stage 3 due to defaults occurring mainly in the first semester.

The cost of risk (expressed in basis points on the average of the outstanding amounts at the beginning of the four quarters preceding the closing, including operating leases) thus amounts to 64 basis points for the year 2020 compared to 25 basis points in 2019.

- In **French Retail Banking**, the cost of commercial risk rose to 52 basis points in 2020 compared to 24 basis points in 2019, including 30 basis points for stage 1/stage 2 in anticipation of future defects.
- At 96 basis points in 2020 (versus 43 basis points in 2019), the cost of risk for the **Retail Banking and International Financial Services** division increased due to defaults mainly in the first semester and by 29 bps of cost of risk stage 1/stage 2.
- The cost of risk for **Corporate Banking and Investor Solutions** is at 57 basis points (compared to 13 basis points in 2019). This cost of risk includes 19 bps of the cost of stage 1/stage 2 risk.

NON-PERFORMING LOANS (NPL)

The following tables have been prepared in accordance with the guidelines of the European Banking Authority (EBA) on the publication of non-performing and renegotiated exposures (document EBA/GL/2018/10 of December 2018).

They present the credit quality of restructured exposures and of performing and non-performing exposures, by geographical area and industry sector, with provisions and associated collateral, as well as details of the change over the period of outstanding loans and non-performing advances.

For information purposes, and in accordance with the ECB's recommendations, the concepts of Basel default, impaired assets and non-performing exposures are aligned within the Group.

The non-performing loan ratio at the end of 2020 is 3.3%.

This ratio is calculated in accordance with the guidelines relating to the requirements of prudential disclosures published by the EBA.

Restructured debt

Within Societe Generale group, "restructured" debt refers to loans for which the amount, term or financial conditions have been contractually modified due to the borrower's insolvency (whether insolvency has already occurred or will definitely occur unless the debt is restructured). Societe Generale aligns its definition of restructured loans with the EBA definition.

Restructured debt does not include commercial renegotiations involving customers for which the Bank has agreed to renegotiate the debt in order to maintain or develop a business relationship, in accordance with credit approval rules in force and without relinquishing any of the principal or accrued interest.

Any situation leading to debt restructuring entails classifying the considered customer in the Basel default category and classifying the loans themselves as impaired in the event of a loss of value greater than 1% of the original debt.

The customers whose loans have been restructured are kept in the default category for as long as the Bank remains uncertain of their ability to meet their future commitments and for at least one year. In other cases, an analysis of the customer's situation makes it possible to estimate his/her ability to repay according to the new schedule. Otherwise, the customer is also transferred to Basel default.

TABLE 41: CREDIT QUALITY OF FORBORNE EXPOSURES (TEMPLATE 1)

	31.12.2020							
	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
		Non-performing forborne						
(In EURm)	Performing forborne	TOTAL	of which defaulted	of which impaired	On performing forborne exposures	On non-performing forborne exposures	TOTAL	of which collateral and financial guarantees received on non-performing exposures with forbearance measures
Loans and advances	**1,210**	**2,438**	**2,438**	**2,438**	**(17)**	**(1,010)**	**992**	**613**
Central banks	-	-	-	-	-	-	-	-
General governments	0	-	-	-	(0)	-	-	-
Credit institutions	-	-	-	-	-	-	-	-
Other financial corporations	7	1	1	1	-	(0)	8	1
Non-financial corporations	704	1,179	1,179	1,179	(17)	(487)	759	477
Households	499	1,258	1,258	1,258	(0)	(524)	225	135
Debt Securities	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Loan commitments given	**12**	**31**	**31**	**31**	**(1)**	**(2)**	**15**	**13**
TOTAL	**1,223**	**2,470**	**2,470**	**2,470**	**(18)**	**(1,012)**	**1,006**	**626**

TABLE 42: CREDIT QUALITY OF PERFORMING AND NON-PERFORMING EXPOSURES BY PAST DUE DAYS TEMPLATE 3)

	31.12.2020											
	Performing exposures			Non-performing exposures								
(In EURm)	TOTAL performing	Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days	TOTAL non perfor-ming	Unlikely to pay that are not past due or are past due ≤ 90 days	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
Loans and advances	**496,521**	**495,424**	**1,097**	**17,040**	**13,221**	**422**	**661**	**1,009**	**902**	**291**	**534**	**17,040**
Central banks	8,771	8,771	-	13	-	-	-	-	-	-	13	13
General governments	26,829	26,815	14	137	45	2	0	12	37	-	43	137
Credit institutions	13,458	13,458	0	33	30	0	0	0	-	-	3	33
Other financial corporations	31,512	31,511	1	142	41	10	-	1	90	-	-	142
Non-financial corporations	205,332	204,865	468	8,731	7,339	137	304	318	314	70	249	8,731
of which SMEs	*44,633*	*44,527*	*106*	*3,705*	*2,945*	*79*	*115*	*159*	*176*	*61*	*170*	*3,705*
Households	210,618	210,004	614	7,984	5,766	274	356	679	462	221	227	7,984
Debt securities	**67,504**	**67,504**	**-**	**121**	**121**	**-**	**-**	**-**	**-**	**-**	**-**	**121**
Central banks	4,563	4,563	-	-	-	-	-	-	-	-	-	-
General governments	47,727	47,727	-	13	13	-	-	-	-	-	-	13
Credit institutions	6,397	6,397	-	-	-	-	-	-	-	-	-	-
Other financial corporations	4,778	4,778	-	-	-	-	-	-	-	-	-	-
Non-financial corporations	4,039	4,039	-	108	108	-	-	-	-	-	-	108
Off-balance-sheet exposures	**336,234**			**1,160**						**-**	**-**	**1,160**
Central banks	42			-						-	-	-
General governments	7,045			0						-	-	0
Credit institutions	75,742			0						-	-	0
Other financial corporations	58,682			12						-	-	12
Non-financial corporations	179,597			1,058						-	-	1,058
Households	15,126			89								89
TOTAL	**900,259**	**562,928**	**1,097**	**18,321**	**13,342**	**422**	**661**	**1,009**	**902**	**291**	**534**	**18,321**

The table as at 31 December 2019 has been modified as follows:

	31.12.2019									
	Performing exposures			Non-performing exposures						
(In EURm)	TOTAL performing	Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days	TOTAL non performing	Unlikely to pay that are not past due or are past due ≤ 90 days	Past due> 90 days≤ 180 days	Past due> 180 days≤ 1 year	Past due> 1 year ≤ 5 years	Past due > 5 years	of which defaulted
Loans and advances	**507,073**	**506,301**	**772**	**16,155**	**11,521**	**1,001**	**566**	**1,943**	**1,123**	**16,014**
Central banks	9,103	9,103	-	13	-	-	-	-	13	13
General governments	16,680	16,674	6	96	-	-	4	54	38	96
Credit institutions	20,471	20,470	-	19	17	-	-	-	3	19
Other financial corporations	46,125	46,079	46	123	1	-	-	122	-	123
Non-financial corporations	201,908	201,540	369	7,359	6,026	128	222	597	386	7,247
of which SMEs	*32,260*	*32,154*	*106*	*3,323*	*2,707*	*65*	*68*	*270*	*214*	*3,323*
Households	212,785	212,434	351	8,544	5,477	873	340	1,171	683	8,516
Debt securities	**67,116**	**67,116**	**-**	**17**	**17**	**-**	**-**	**-**	**-**	**17**
Central banks	4,931	4,931	-	-	-	-	-	-	-	-
General governments	46,778	46,778	-	-	-	-	-	-	-	-
Credit institutions	7,525	7,525	-	-	-	-	-	-	-	-
Other financial corporations	4,020	4,020	-	-	-	-	-	-	-	-
Non-financial corporations	3,862	3,862	-	17	17	-	-	-	-	17
Off-balance-sheet exposures	**326,688**	**-**	**-**	**1,254**	**-**	**-**	**-**	**-**	**-**	**1,254**
Central banks	252			-						-
General governments	3,091			-						-
Credit institutions	84,927			-						-
Other financial corporations	44,412			-						-
Non-financial corporations	177,290			1,175						1,175
Households	16,716			79						79
TOTAL	**900,877**	**573,417**	**772**	**17,425**	**11,537**	**1,001**	**566**	**1,943**	**1,123**	**17,285**

TABLE 43: PERFORMING AND NON-PERFORMING EXPOSURES AND RELATED PROVISIONS (TEMPLATE 4)

	31.12.2020														
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							Collateral and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
(In EURm)	TOTAL	of which stage 1[1]	of which stage 2[2]	TOTAL	of which stage 2[2]	of which stage 3[3]	TOTAL	of which stage 1[1]	of which stage 2[2]	TOTAL	of which stage 2[2]	of which stage 3[3]	Accumulated partial write-off	On performing exposures	On non performing exposures
Loans and advances	**496,521**	**446,669**	**49,852**	**17,040**	**-**	**17,040**	**(3,024)**	**(1,075)**	**(1,950)**	**(8,795)**	**-**	**(8,795)**	**(1,917)**	**257,287**	**4,240**
Central banks	8,771	8,770	1	13	-	13	(0)	(0)	(0)	(13)	-	(13)	-	5	-
General governments	26,829	26,451	377	137	-	137	(14)	(5)	(9)	(67)	-	(67)	(0)	4,922	59
Credit institutions	13,458	12,968	490	33	-	33	(5)	(3)	(2)	(7)	-	(7)	(0)	1,600	23
Other financial corporations	31,512	31,303	209	142	-	142	(16)	(10)	(6)	(72)	-	(72)	-	6,718	24
Non-financial corporations	205,332	175,596	29,736	8,731	-	8,731	(1,689)	(496)	(1,193)	(4,512)	-	(4,512)	(854)	94,814	2,358
of which SMEs	*44,633*	*38,321*	*6,312*	*3,705*	*-*	*3,705*	*(570)*	*(147)*	*(424)*	*(2,019)*	*-*	*(2,019)*	*-*	*25,943*	*912*
Households	210,618	191,581	19,037	7,984	-	7,984	(1,301)	(561)	(740)	(4,124)	-	(4,124)	(1,063)	149,230	1,776
Debt securities	**67,504**	**67,413**	**91**	**121**	**-**	**121**	**(5)**	**(5)**	**(1)**	**(45)**	**-**	**(45)**	**-**	**5,590**	**-**
Central banks	4,563	4,522	41	-	-	-	(0)	(0)	(0)	-	-	-	-	-	-
General governments	47,727	47,708	19	13	-	13	(4)	(4)	(0)	(13)	-	(13)	-	-	-
Credit institutions	6,397	6,366	30	-	-	-	(0)	(0)	-	-	-	-	-	222	-
Other financial corporations	4,778	4,778	-	-	-	-	(0)	(0)	-	-	-	-	-	2,292	-
Non-financial corporations	4,039	4,039	-	108	-	108	(1)	(1)	-	(32)	-	(32)	-	3,076	-
Off-balance-sheet exposures	**336,234**	**308,236**	**27,998**	**1,160**	**-**	**1,160**	**(591)**	**(162)**	**(429)**	**(337)**	**-**	**(337)**	**-**	**51,849**	**222**
Central banks	42	42	-	-	-	-	(0)	(0)	-	-	-	-		-	-
General governments	7,045	6,964	80	0	-	0	(1)	(1)	(1)	-	-	-		3,324	-
Credit institutions	75,742	75,204	538	0	-	0	(64)	(2)	(63)	-	-	-		317	-
Other financial corporations	58,682	58,388	294	12	-	12	(7)	(5)	(2)	(2)	-	(2)		5,234	-
Non-financial corporations	179,597	153,032	26,565	1,058	-	1,058	(459)	(129)	(331)	(317)	-	(317)		38,257	208
Households	15,126	14,606	521	89	-	89	(58)	(27)	(32)	(18)	-	(18)		4,716	14
TOTAL	**900,259**	**822,318**	**77,940**	**18,321**	**-**	**18,321**	**(3,621)**	**(1,242)**	**(2,379)**	**(9,177)**	**-**	**(9,177)**	**(1,917)**	**314,727**	**4,462**

The table as at 31 December 2019 has been modified as follows:

	31.12.2019														
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							Collateral and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
(In EURm)	TOTAL	of which stage 1[1]	of which stage 2[2]	TOTAL	of which stage 2[2]	of which stage 3[3]	TOTAL	of which stage 1[1]	of which stage 2[2]	TOTAL	of which stage 2[2]	of which stage 3[3]	Accu-mulated partial write-off	On perfor-ming exposures	On non perfor-ming exposures
Loans and advances	**507,073**	**481,195**	**25,878**	**16,155**	**-**	**16,155**	**(1,933)**	**(858)**	**(1,075)**	**(8,963)**	**-**	**(8,963)**	**(2,134)**	**241,864**	**3,524**
Central banks	9,103	9,103	0	13	-	13	(0)	(0)	(0)	(13)	-	(13)	-	56	-
General governments	16,680	16,589	91	96	-	96	(2)	(1)	(0)	(53)	-	(53)	(0)	4,055	43
Credit institutions	20,471	20,369	101	19	-	19	(3)	(3)	(0)	(6)	-	(6)	(0)	2,591	1
Other financial corporations	46,125	46,051	74	123	-	123	(7)	(6)	(1)	(74)	-	(74)	(1,105)	9,832	1
Non-financial corporations	201,908	192,416	9,492	7,359	-	7,359	(941)	(434)	(507)	(4,252)	-	(4,252)	-	95,100	1,588
of which SMEs	*32,260*	*28,297*	*3,963*	*3,323*	*-*	*3,323*	*(348)*	*(348)*	*-*	*(2,007)*	*-*	*(2,007)*	*-*	*21,400*	*694*
Households	212,785	196,665	16,119	8,544	-	8,544	(981)	(414)	(567)	(4,564)	-	(4,564)	(1,029)	130,231	1,891
Debt securities	**67,116**	**67,016**	**100**	**17**	**-**	**17**	**(11)**	**(5)**	**(6)**	**(8)**	**-**	**(8)**	**-**	**-**	**-**
Central banks	4,931	4,860	71	-	-	-	(3)	(1)	(2)	-	-	-	-	-	-
General governments	46,778	46,768	10	-	-	-	(6)	(2)	(4)	-	-	-	-	-	-
Credit institutions	7,525	7,525	-	-	-	-	(0)	(0)	-	-	-	-	-	-	-
Other financial corporations	4,020	4,020	-	-	-	-	(0)	(0)	-	-	-	-	-	-	-
Non-financial corporations	3,862	3,843	19	17	-	17	(2)	(1)	(1)	(8)	-	(8)	-	-	-
Off-balance-sheet exposures	**326,688**	**322,985**	**3,703**	**1,254**	**-**	**1,254**	**(320)**	**(136)**	**(184)**	**(320)**	**-**	**(320)**	**-**	**56,523**	**331**
Central banks	252	252	-	-	-	-	(0)	(0)	-	-	-	-		80	-
General governments	3,091	3,091	0	0	-	0	(0)	(0)	-	-	-	-		2,742	-
Credit institutions	84,927	84,615	312	0	-	0	(40)	(1)	(39)	-	-	-		564	-
Other financial corporations	44,412	44,410	2	-	-	-	(3)	(3)	0	-	-	-		5,238	-
Non-financial corporations	177,290	174,443	2,847	1,175	-	1,175	(218)	(106)	(112)	(310)	-	(310)		40,795	322
Households	16,716	16,174	542	79	-	79	(59)	(25)	(34)	(10)	-	(10)		7,105	9
TOTAL	**900,877**	**871,196**	**29,681**	**17,425**	**-**	**17,425**	**(2,264)**	**(999)**	**(1,265)**	**(9,290)**	**-**	**(9,290)**	**-**	**298,387**	**3,856**

(1) Assets without significant increase in credit risk since initial recognition.
(2) Assets with significant increase in credit risk since initial recognition, but not impaired..
(3) Impaired assets.

TABLE 44: QUALITY OF NON-PERFORMING EXPOSURES BY GEOGRAPHY (TEMPLATE 5)

	31.12.2020					
	Gross carrying/nominal amount					
		of which non-performing				
(In EURm)	TOTAL nominal	TOTAL non performing	of which defaulted	of which subject to impairment	Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given
On-balance-sheet exposures	**581,186**	**17,161**	**17,161**	**558,286**	**(11,870)**	**-**
France	293,513	8,154	8,154	272,283	(5,766)	
United States	46,365	411	411	46,209	(232)	
Czech Republic	37,480	643	643	37,480	(496)	
Germany	24,610	560	560	24,552	(304)	
United Kingdom	20,460	398	398	19,974	(158)	
Luxembourg	11,830	608	608	11,708	(52)	
Japan	1,059	0	0	1,059	(17)	
Other countries	145,869	6,388	6,388	145,022	(4,844)	
Off-balance-sheet exposures	**337,393**	**1,160**	**1,160**	**-**	**-**	**(928)**
France	151,864	556	556			(374)
United States	50,884	27	27			(76)
Czech Republic	6,842	63	63			(49)
Germany	11,410	12	12			(32)
United Kingdom	14,634	6	6			(12)
Luxembourg	8,544	-	-			(2)
Japan	24,860	-	-			(2)
Other countries	68,355	495	495			(380)
TOTAL	**918,579**	**18,321**	**18,321**	**558,286**	**(11,870)**	**(928)**

The table as at 31 December 2019 has been modified as follows:

	31.12.2019					
	Gross carrying/nominal amount					
		of which non-performing				
(In EURm)	TOTAL nominal	TOTAL non performing	of which defaulted	of which subject to impairment	Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given
On-balance-sheet exposures	**590,360**	**16,171**	**16,171**	**564,843**	**(10,914)**	**-**
France	287,203	9,124	9,124	265,798	(5,890)	
United States	56,895	241	241	56,028	(105)	
Czech Republic	35,761	515	515	35,761	(398)	
Germany	23,124	354	354	23,082	(193)	
United Kingdom	17,037	167	167	17,054	(74)	
Luxembourg	12,520	84	84	12,506	(15)	
Japan	1,276	(0)	(0)	972	(9)	
Other countries	156,545	5,687	5,687	153,642	(4,230)	
Off-balance-sheet exposures	**327,942**	**1,254**	**1,254**	**-**	**-**	**(640)**
France	164,940	709	709			(296)
United States	40,621	101	101			(39)
Czech Republic	6,821	49	49			(26)
Germany	7,460	1	1			(25)
United Kingdom	24,629	1	1			(6)
Luxembourg	7,789	1	1			(2)
Japan	16,209	-	-			(0)
Other countries	59,474	392	392			(247)
TOTAL	**918,302**	**17,425**	**17,425**	**564,843**	**(10,914)**	**(640)**

TABLE 45: CREDIT QUALITY OF LOANS AND ADVANCES BY INDUSTRY SECTOR (TEMPLATE 6)

The table below indicates loans and advances to non-financial corporations, in accordance with EBA guidelines (EBA/GL/2018/10).

	31.12.2020				
	Gross carrying amount				
		of which non-performing			
(In EURm)	TOTAL nominal	TOTAL non performant	of which defaulted	of which loans and advances subject to impairment	Accumulated impairment
Agriculture, forestry and fishing	1,773	103	103	1,695	(85)
Mining and quarrying	10,387	399	399	10,371	(188)
Manufacturing	29,673	1,699	1,699	28,914	(1,235)
Electricity, gas, steam and air conditioning supply	11,891	100	100	11,778	(96)
Water supply	2,126	28	28	1,729	(30)
Construction	7,388	724	724	6,796	(578)
Wholesale and retail trade	26,632	2,063	2,063	25,763	(1,432)
Transport and storage	18,338	519	519	17,769	(361)
Accommodation and food service activities	3,918	901	901	3,708	(376)
Information and communication	6,843	136	136	6,773	(110)
Financial and insurance actvities	18,348	283	283	16,867	(313)
Real estate activities	26,958	552	552	24,356	(336)
Professional, scientific and technical activities	6,572	262	262	6,217	(255)
Administrative and support service activities	6,160	291	291	6,000	(165)
Public administration and defence, compulsory social security	2,134	2	2	1,895	(2)
Education	319	24	24	312	(12)
Human health services and social work activities	1,550	82	82	1,489	(55)
Arts, entertainment and recreation	874	41	41	776	(59)
Other services	32,181	522	522	30,033	(512)
TOTAL	**214,063**	**8,731**	**8,731**	**203,241**	**(6,201)**

The table as at 31 December 2019 has been modified as follows:

	31.12.2019				
	Gross carrying amount				
		of which non-performing			
(In EURm)	TOTAL nominal	TOTAL non performant	of which defaulted	of which loans and advances subject to impairment	Accumulated impairment
Agriculture, forestry and fishing	1,743	102	102	1,660	(82)
Mining and quarrying	10,527	461	461	10,507	(148)
Manufacturing	29,783	1,349	1,349	28,868	(1,026)
Electricity, gas, steam and air conditioning supply	11,393	129	129	11,237	(83)
Water supply	2,057	37	37	1,646	(27)
Construction	7,128	747	747	6,534	(503)
Wholesale and retail trade	25,168	1,615	1,615	24,076	(1,195)
Transport and storage	16,788	492	492	16,231	(412)
Accommodation and food service activities	2,884	314	314	2,647	(214)
Information and communication	6,208	153	153	6,132	(68)
Financial and insurance actvities	-	-	-	-	-
Real estate activities	24,005	463	463	21,520	(279)
Professional, scientific and technical activities	6,348	199	199	5,886	(171)
Administrative and support service activities	5,896	131	131	5,723	(102)
Public administration and defence, compulsory social security	11,108	4	4	3,434	(6)
Education	283	10	10	277	(8)
Human health services and social work activities	1,565	24	24	1,496	(32)
Arts, entertainment and recreation	714	38	38	670	(24)
Other services	45,669	1,091	1,091	42,630	(813)
TOTAL	**209,267**	**7,359**	**7,359**	**191,175**	**(5,193)**

TABLE 46: COLLATERAL OBTAINED BY TAKING POSSESSION AND EXECUTION PROCESSES (TEMPLATE 9)

	31.12.2020	
	Collateral obtained by taking possession	
(In EURm)	Value at initial recognition	Accumulated negative changes
Property, plant and equipment (PP&E)	16	(3)
Other than PP&E	21	(9)
Residential immovable property	-	-
Commercial Immovable property	-	-
Movable property (auto, shipping, etc.)	-	-
Equity and debt instruments	-	-
Other	*21*	*(9)*
TOTAL	**37**	**(11)**

The opening periods of the two tables below have been modified in line with table 43 as at 31 December 2019.

TABLE 47: CHANGES IN THE STOCK OF DEFAULTED AND IMPAIRED LOANS AND DEBT SECURITIES (CR2-B)

	31.12.2020
(In EURm)	Gross carrying value defaulted exposures
Opening balance	**16,171**
Loans and debt securities that have defaulted or impaired since the last reporting period	4,578
Returned to non-defaulted status	(898)
Amounts written off	(1,869)
Other changes	(822)
CLOSING BALANCE	**17,161**

TABLE 48: CHANGES IN CREDIT RISK ADJUSTMENTS (CR2-A)

	31.12.2020			
(In EURm)	Stage 1	Stage 2	Stage 3	Total
Opening balance	**(999)**	**(1,265)**	**(9,290)**	**(11,554)**
Increases due to origination and acquisition	(393)	(160)	(187)	(739)
Decreases due to derecognition	55	21	1	77
Changes due to change in credit risk (net)	110	(781)	(1,126)	(1,798)
Changes due to modifications without derecognition (net)	(148)	(372)	(232)	(752)
Decrease in allowance account due to write-offs	140	114	1,422	1,676
Other adjustments	(8)	64	235	291
Closing balance	**(1,242)**	**(2,379)**	**(9,177)**	**(12,798)**
Recoveries of previously written-off amounts recorded directly to the statement of profit or loss	-	-	114	114
Amounts written-off directly to the statement of profit or loss	-	-	(241)	(241)

TABLE 49: INFORMATION ON LOANS AND ADVANCES SUBJECT TO LEGISLATIVE AND NON-LEGISLATIVE MORATORIA

	31.12.2020													
	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk						
		Performing			Non-performing				Performing			Non-performing		
(In EURm)	TOTAL	TOTAL performing	of which: exposures with forbearance measures	of which: Instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage 2)	TOTAL non-performing	of which: exposures with forbearance measures	of which: Unlikely to pay that are not past-due or past-due <= 90 days	TOTAL	TOTAL performing	of which: exposures with forbearance measures	of which: Instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage 2)	TOTAL non-performing	of which: exposures with forbearance measures	of which: Unlikely to pay that are not past-due or past-due <= 90 days
Loans and advances subject to moratorium	**4,606**	**4,553**	**34**	**2,028**	**53**	**3**	**26**	**(76)**	**(69)**	**(4)**	**(54)**	**(8)**	**(0)**	**(3)**
of which: Households	525	508	0	110	17	1	10	(3)	(1)	(0)	(1)	(2)	(0)	(1)
of which: Collateralised by residential immovable property	*485*	*469*	*0*	*99*	*16*	*0*	*10*	*(3)*	*(1)*	*(0)*	*(1)*	*(2)*	*(0)*	*(1)*
of which: Non-financial corporations	4,080	4,045	34	1,918	35	2	16	(73)	(67)	(4)	(53)	(6)	(0)	(2)
of which: Small and Medium-sized Enterprises	*1,818*	*1,792*	*34*	*420*	*26*	*2*	*10*	*(54)*	*(50)*	*(4)*	*(38)*	*(4)*	*(0)*	*(1)*
of which: Collateralised by commercial immovable property	*982*	*972*	*-*	*125*	*9*	*-*	*4*	*(5)*	*(4)*	*-*	*(4)*	*(1)*	*-*	*(0)*

TABLE 50: BREAKDOWN OF LOANS AND ADVANCES SUBJECT TO LEGISLATIVE AND NON-LEGISLATIVE MORATORIA BY RESIDUAL MATURITY OF THE MORATORIA

	31.12.2020								
		Gross carrying amount							
					Residual maturity of moratoria				
(In EURm)	Number of obligors	TOTAL	of which: legislative moratoria	of which: expired	<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances for which moratorium was offered	443,017	33,831							
Loans and advances subject to moratorium (granted)	418,533	32,930	3,996	28,324	2,494	1,921	133	22	36
of which: Households		*5,978*	*1,611*	*5,453*	*207*	*275*	*33*	*2*	*7*
of which: Collateralised by residential immovable property		*4,464*	*1,269*	*3,978*	*168*	*275*	*33*	*2*	*7*
of which: Non-financial corporations		*26,936*	*2,383*	*22,856*	*2,286*	*1,646*	*99*	*21*	*28*
of which: Small and Medium-sized Enterprises		*17,022*	*1,964*	*15,204*	*337*	*1,405*	*57*	*8*	*10*
of which: Collateralised by commercial immovable property		*3,162*	*1,346*	*2,180*	*165*	*796*	*19*	*-*	*-*

Societe Generale group has granted moratoria to its clients on their loans and advances in order to support them during the Covid-19 crisis.

As at 31 Decembre 2020, the exposure of the Group related to loans being subject to moratoria[1] amounts to EUR 32.9 billion, of which EUR 4.6 billion are still active, among which 54% have a residual maturity that is lower than 3 months. These moratoria have been granted to households, comprised of professionals as well as of individuals, up to EUR 6 billion and to non-financial corporations up to EUR 27 billion.

(1) in accordance with EBA guidelines on legislative and non-legislative moratoria on loan repayments applied due to the Covid-19 pandemic.

TABLE 51: INFORMATION ON NEWLY ORIGINATED LOANS AND ADVANCES PROVIDED UNDER NEWLY APPLICABLE PUBLIC GUARANTEE SCHEMES INTRODUCED IN RESPONSE TO COVID-19 CRISIS

	31.12.2020			
	Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
(In EURm)	TOTAL	of which: forborne	Public guarantees received	Inflows to non performing exposures
Newly originated loans and advances subject to public guarantee schemes	18,894	-	16,946	243
of which: Households	*4,350*			*43*
of which: Collateralised by residential immovable property	-			-
of which: Non-financial corporations	*14,513*	-	*13,006*	*199*
of which: Small and Medium-sized Enterprises	*6,408*	-	-	*65*
of which: Collateralised by commercial immovable property	-			-

As at 31 December 2020, EUR 18.9 billion of loans secured by public guarantee mechanisms have been granted by Societe Generale group to its clients. The amount of guarantees associated with these loans amounts to EUR 16.9 billion.

6.7 ADDITIONAL QUANTITATIVE INFORMATION ON CREDIT RISK

DEFINITION OF REGULATORY METRICS

The main metrics used in the following tables are:

- Exposure: defined as all assets (*e.g.* loans, receivables, accruals, etc.) associated with market or customer transactions, recorded on and off-balance sheet;
- Net exposure: corresponds to initial exposure on a net basis, net of provisions;
- EAD (Exposure At Default) is defined as the bank's exposure (on- and off-balance sheet) in the event of a counterparty's default. Unless otherwise specifically indicated to the contrary, the EAD is reported post-CRM (Credit Risk Mitigation), after factoring in guarantees and collateral. Under the Standardised method, EADs are presented net of specific provisions and financial collateral;
- Risk-Weighted Assets (RWA): are computed from the exposures and the associated level of risk, which depends on the debtors' credit quality;
- Expected Loss (EL): potential loss incurred, given the quality of the structuring of a transaction and any risk mitigation measures such as collateral. Under the AIRB method, the following equation summarises the relation between these variables: EL = EAD x PD x LGD (except for defaulted exposures).

BREAKDOWN OF CREDIT RISK – OVERVIEW

TABLE 52: CREDIT RISK EXPOSURE, EAD AND RWA BY APPROACH AND EXPOSURE CLASS

	31.12.2020								
(In EURm)	IRB approach			Standardised approach			Total		
Exposure class	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**
Sovereign	238,278	259,525	6,035	9,884	11,795	7,965	248,162	271,320	14,000
Institutions	50,071	42,174	4,260	14,400	20,213	3,267	64,472	62,386	7,526
Corporates	336,718	218,170	97,642	47,472	30,320	27,815	384,190	248,490	125,456
Retail	173,480	171,042	32,667	47,489	30,688	20,413	220,969	201,730	53,081
Others	41,646	41,345	27,241	56,393	52,079	33,612	98,039	93,425	60,853
TOTAL	**840,192**	**732,255**	**167,845**	**175,638**	**145,095**	**93,072**	**1,015,831**	**877,351**	**260,917**

The table as at 31 December 2019 has been modified as follows in order to exclude risk exposures related to contributions to the default funds of central counterparties (EUR 1.1 billion of RWA as at 31 December 2019):

	31.12.2019								
(In EURm)	IRB approach			Standardised approach			Total		
Exposure class	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**
Sovereign	171,106	182,628	5,396	8,370	8,495	7,980	179,476	191,123	13,376
Institutions	49,459	41,870	4,304	13,047	15,679	2,957	62,506	57,549	7,260
Corporates	321,911	221,595	92,792	56,758	36,158	33,280	378,669	257,753	126,072
Retail	171,426	170,360	35,238	46,758	32,899	22,382	218,184	203,259	57,621
Others	36,756	36,522	23,778	55,194	50,665	34,820	91,950	87,188	58,598
TOTAL	**750,657**	**652,977**	**161,507**	**180,127**	**143,895**	**101,420**	**930,785**	**796,871**	**262,928**

BREAKDOWN OF CREDIT RISK – DETAIL

TABLE 53: CREDIT QUALITY OF EXPOSURES BY EXPOSURE CLASS AND INSTRUMENT (CR1-A)

	31.12.2020			
	Gross carrying values of exposures			
(In EURm)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	Net values
Central governments and central banks	97	238,181	101	238,177
Institutions	54	50,017	78	49,994
Corporates	6,956	329,761	4,357	332,360
of which: Specialised Lending	*1,477*	*61,110*	*825*	*61,763*
of which: SME	*2,121*	*39,658*	*1,293*	*40,486*
Retail	5,141	168,338	2,925	170,554
Secured by real estate property	*1,516*	*110,266*	*382*	*111,400*
of which: SME	*134*	*5,843*	*31*	*5,946*
of which: Non-SME	*1,382*	*104,423*	*351*	*105,454*
Qualifying Revolving	*306*	*4,581*	*235*	*4,653*
Other Retail	*3,319*	*53,491*	*2,309*	*54,501*
SME	1,485	22,060	1,007	22,538
Non-SME	1,834	31,430	1,302	31,963
Equity exposures IRB	-	6,274	-	6,274
TOTAL IRB APPROACH	**12,248**	**792,572**	**7,461**	**797,359**
Central governments or central banks	-	8,529	2	8,527
Regional governments or local authorities	-	582	11	570
Public sector entities	-	292	2	290
Multilateral developments banks	-	1,355	0	1,355
International Organisations	-	-	-	-
Institutions	-	13,527	2	13,525
Corporates	-	47,472	342	47,130
of which: SME	-	*9,346*	*114*	*9,231*
Retail	-	47,489	346	47,144
of which: SME	-	*13,692*	*107*	*13,586*
Secured by mortgages on immovable property	-	15,435	161	15,273
of which: SME	-	*1,324*	*15*	*1,309*
Exposures in default	6,622	-	3,582	3,040
Items associated with particularly	27	480	27	480
Covered bonds	-	206	0	206
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-
Claims in the form of CIU	-	5	-	5
Equity exposures	-	974	-	974
Other items	-	29,012	-	29,012
TOTAL SA APPROACH	**6,650**	**165,357**	**4,475**	**167,532**
TOTAL	**18,898**	**957,929**	**11,936**	**964,892**
of which: Loans	*17,588*	*672,583*	*11,003*	*679,167*
of which: Debt securities	*96*	*65,743*	*43*	*65,796*
of which: Off-balance-sheet exposures	*1,215*	*219,603*	*890*	*219,928*

TABLE 54: NET EXPOSURES BY EXPOSURE CLASS (CRB-B)

	31.12.2020		31.12.2019	
(In EURm)	Net value of exposures at the end of the period	Average net exposure over the period	Net value of exposures at the end of the period	Average net exposure over the period
Central governments or central banks	238,177	223,215	171,036	167,133
Institutions	49,994	51,632	49,397	49,446
Corporates	332,360	331,857	318,720	320,478
of which: Specialised Lending	*61,763*	*60,261*	*61,505*	*59,401*
of which: SME	*40,486*	*40,499*	*39,792*	*41,068*
Retail	170,554	169,680	168,050	162,473
Secured by real estate property	*111,400*	*111,222*	*110,607*	*106,596*
of which: SME	*5,946*	*6,079*	*6,287*	*6,280*
of which: Non-SME	*105,454*	*105,143*	*104,320*	*100,316*
Qualifying Revolving	*4,653*	*4,736*	*5,037*	*5,093*
Other Retail	*54,501*	*53,722*	*52,405*	*50,784*
of which: SME	*22,538*	*21,186*	*18,769*	*18,396*
of which: Non-SME	*31,963*	*32,536*	*33,636*	*32,387*
Equity	6,274	5,934	5,520	4,913
TOTAL IRB APPROACH	**797,359**	**782,318**	**712,722**	**704,443**
Central governments or central banks	8,527	8,006	7,923	9,029
Regional governments or localauthorities	570	573	720	855
Public sector entities	290	364	421	534
Multilateral Development Banks	1,355	941	443	440
International Organisations	-	0	-	-
Institutions	13,525	12,899	11,899	14,788
Corporates	47,130	49,356	56,500	58,083
of which: SME	*9,231*	*10,366*	*11,638*	*12,962*
Retail	47,144	47,301	46,427	46,761
of which: SME	*13,586*	*14,336*	*14,550*	*14,727*
Secured by mortgages on immovable property	15,273	14,649	15,069	15,073
of which: SME	*1,309*	*1,558*	*1,321*	*1,074*
Exposures in default	3,040	3,204	3,274	3,016
Items associated with particularly high risk	480	478	450	396
Covered bonds	206	102	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-
Collective investments undertakings (CIU)	5	29	69	110
Equity exposures	974	1,375	1,636	1,679
Other exposures	29,012	29,319	29,664	30,763
TOTAL SA APPROACH	**167,532**	**168,597**	**174,496**	**181,527**
TOTAL	**964,892**	**950,915**	**887,218**	**885,970**

In accordance with the EBA guidelines for revised Pillar 3 (EBA/GL/2016/11), amounts are presented without securitisation, contributions to the default funds of central counterparties, as well as other non-credit obligation assets under the advanced approach.

TABLE 55: STANDARDISED APPROACH – CREDIT RISK EXPOSURE AND CREDIT RISK MITIGATION EFFECTS (CRM) (CR4)

The credit conversion factor (CCF) is the ratio between the current undrawn part of a credit line which could be drawn and would therefore be exposed in the event of default and the undrawn part of this credit line. The significance of the credit line depends on the authorised limit, unless the unauthorised limit is greater.

The concept of "credit risk mitigation" (CRM) is a technique used by an institution to reduce the credit risk associated with its exposures.

Amounts indicated in this table are without securitisation and contributions to default funds of CCPs.

	31.12.2020					
(In EURm)	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Asset classes	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWA**	**RWA density**
Central governments or central banks	8,492	35	10,288	28	7,932	77%
Regional government or local authorities	497	73	731	49	193	25%
Public sector entities	272	18	262	2	71	27%
Multilateral development banks	1,339	16	1,478	1	33	2%
International organisations	-	-	-	-	-	
Institutions	8,806	4,719	18,710	459	3,002	16%
Corporates	36,371	10,759	27,470	2,850	27,815	92%
Retail	40,619	6,525	29,248	1,440	20,413	67%
Secured by mortgages on immovable property	14,941	332	14,891	152	6,645	44%
Exposures in defaul	2,861	179	2,814	77	3,057	106%
Higher-risk categories	295	186	294	75	553	150%
Covered bonds	206	-	206	-	21	10%
Institutions and corporates with a short term credit assessment	-	-	-	-	-	
Collective investment undertakings	5	-	5	-	5	100%
Equity	974	-	974	-	706	72%
Other items	29,012	-	29,012	-	22,324	77%
TOTAL	**144,692**	**22,841**	**136,382**	**5,134**	**92,771**	**66%**

(In EURm)	31.12.2019					
	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Asset classes	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWA**	**RWA density**
Central governments or central banks	7,798	126	7,928	21	7,980	100%
Regional government or local authorities	644	76	661	33	206	30%
Public sector entities	405	16	389	4	120	31%
Multilateral development banks	422	21	545	-	-	0%
International organisations	-	-	-	-	-	
Institutions	6,233	5,666	13,299	1,293	2,631	18%
Corporates	41,170	15,330	32,997	3,160	33,280	92%
Retail	39,941	6,486	31,353	1,546	22,382	68%
Secured by mortgages on immovable property	14,586	482	14,547	189	6,273	43%
Exposures in default	2,856	418	2,805	97	3,100	107%
Higher-risk categories	296	154	295	77	561	151%
Covered bonds	-	-	-	-	-	
Institutions and corporates with a short term credit assessment	-	-	-	-	-	
Collective investment undertakings	65	4	65	2	67	100%
Equity	1,636	-	1,636	-	1,942	119%
Other items	29,664	-	29,664	-	22,811	77%
TOTAL	**145,716**	**28,780**	**136,185**	**6,421**	**101,354**	**71%**

TABLE 56: INTERNAL APPROACH - CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (CR6) - AIRB

The table below pesents Group exposures subject to credit risk and for which an internal model is used with a view to calculating RWA.

	31.12.2020											
(In EURm)	PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Average LGD	Average maturity	RWA	RWA density	EL	Value adjust-ments and Provi-sions
Central governments and central banks	0.00 to <0.15	215,434	3,033	67%	250,956	0.02%	1.98%	1.18	2,083	1%	2	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	727	0	20%	3,234	0.26%	17.80%	2.79	719	22%	1	
	0.50 to <0.75	11,990	150	75%	1,454	0.50%	32.58%	2.52	879	60%	2	
	0.75 to <2.50	1,078	593	75%	2,526	1.76%	22.75%	2.60	1,206	48%	23	
	2.50 to <10.00	2,928	1,317	68%	867	5.43%	23.86%	2.22	753	87%	12	
	10.00 to <100.00	628	248	84%	362	11.65%	22.46%	1.99	386	107%	10	
	100.00 (default)	97	0	75%	62	100.00%	81.31%	1.12	4	7%	68	
	Subtotal	**232,882**	**5,341**	**69%**	**259,461**	**0.10%**	**2.67%**	**1.23**	**6,029**	**2%**	**120**	**(101)**
Institutions	0.00 to <0.15	23,624	8,925	64%	36,845	0.04%	11.52%	2.47	1,667	5%	2	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	492	413	58%	797	0.26%	22.52%	1.54	175	22%	0	
	0.50 to <0.75	6,993	3,723	23%	1,987	0.28%	14.12%	1.97	436	22%	1	
	0.75 to <2.50	2,435	796	50%	1,135	1.58%	20.50%	1.54	645	57%	4	
	2.50 to <10.00	1,559	629	52%	1,197	3.97%	24.09%	1.83	1,023	85%	13	
	10.00 to <100.00	215	212	36%	178	14.28%	8.54%	1.05	257	144%	7	
	100.00 (default)	52	2	26%	31	100.00%	25.67%	3.04	55	176%	7	
	Subtotal	**35,370**	**14,699**	**52%**	**42,170**	**0.34%**	**12.51%**	**2.38**	**4,259**	**10%**	**35**	**(78)**
Corporate – SME	0.00 to <0.15	852	486	53%	1,345	0.09%	36.31%	2.41	484	36%	3	
	0.15 to <0.25	3,984	644	88%	3,482	0.20%	12.86%	2.23	305	9%	1	
	0.25 to <0.50	1,484	848	52%	1,616	0.28%	36.74%	2.52	492	30%	2	
	0.50 to <0.75	1,763	1,162	49%	2,965	0.53%	34.63%	2.77	1,272	43%	5	
	0.75 to <2.50	10,617	1,771	53%	9,050	1.51%	28.78%	3.48	5,163	57%	40	
	2.50 to <10.00	9,290	1,402	59%	8,302	4.53%	32.69%	2.86	6,483	78%	122	
	10.00 to <100.00	3,000	248	54%	2,380	16.33%	30.66%	2.76	2,592	109%	118	
	100.00 (default)	1,799	226	47%	1,796	100.00%	37.38%	2.23	2,320	129%	846	
	Subtotal	**32,790**	**6,787**	**56%**	**30,937**	**8.81%**	**29.98%**	**2.88**	**19,111**	**62%**	**1,137**	**(1,213)**
Corporate – Specialised lending	0.00 to <0.15	4,300	2,494	43%	9,549	0.07%	20.08%	3.00	1,331	14%	1	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	4,030	1,804	49%	4,523	0.26%	14.04%	2.97	733	16%	2	
	0.50 to <0.75	7,509	2,823	44%	8,848	0.50%	13.27%	3.54	1,977	22%	6	
	0.75 to <2.50	15,885	6,990	40%	14,026	1.49%	14.69%	3.25	5,452	39%	38	
	2.50 to <10.00	8,415	2,865	38%	6,027	4.28%	13.95%	2.63	2,983	49%	45	
	10.00 to <100.00	1,077	147	41%	468	15.06%	20.59%	3.38	478	102%	17	
	100.00 (default)	1,367	90	79%	1,179	100.00%	39.81%	2.21	624	53%	594	
	Subtotal	**42,583**	**17,214**	**42%**	**44,619**	**3.98%**	**16.12%**	**3.12**	**13,577**	**30%**	**703**	**(820)**
Corporate – Other	0.00 to <0.15	18,971	80,335	46%	62,789	0.07%	35.15%	2.27	12,244	20%	16	
	0.15 to <0.25	44	10	33%	19	0.16%	37.90%	2.07	5	28%	0	
	0.25 to <0.50	7,602	20,891	47%	16,681	0.26%	31.41%	2.31	5,864	35%	16	
	0.50 to <0.75	18,168	10,145	60%	12,037	0.50%	30.41%	2.21	5,600	47%	22	
	0.75 to <2.50	18,216	16,007	48%	21,355	1.52%	25.31%	2.11	12,567	59%	92	
	2.50 to <10.00	17,080	8,934	46%	16,847	4.39%	30.17%	2.26	16,345	97%	241	
	10.00 to <100.00	4,678	1,951	43%	3,285	15.14%	31.92%	2.02	5,007	152%	155	
	100.00 (default)	2,770	3,120	9%	2,595	100.00%	36.01%	1.82	2,117	82%	1,337	
	Subtotal	**87,530**	**141,392**	**47%**	**135,609**	**3.17%**	**32.00%**	**2.23**	**59,749**	**44%**	**1,880**	**(2,171)**
Retail – Secured by real estate SME	0.00 to <0.15	26	7	100%	79	0.03%	11.94%		27	34%	0	
	0.15 to <0.25	3	-		3	0.21%	13.65%		0	6%	0	
	0.25 to <0.50	824	10	100%	833	0.27%	16.19%		55	7%	0	
	0.50 to <0.75	1,641	25	100%	1,666	0.62%	9.76%		155	9%	1	
	0.75 to <2.50	2,376	33	100%	2,409	1.09%	14.12%		362	15%	4	
	2.50 to <10.00	648	11	100%	659	2.92%	14.80%		190	29%	3	
	10.00 to <100.00	236	3	100%	240	15.64%	9.83%		106	44%	4	
	100.00 (default)	133	1	85%	87	100.00%	40.01%		142	164%	24	
	Subtotal	**5,887**	**90**	**100%**	**5,976**	**3.05%**	**13.44%**		**1,037**	**17%**	**36**	**(31)**

	31.12.2020											
(In EURm)	**PD scale**	**Original on-balance sheet gross exposure**	**Off-balance sheet exposures pre CCF**	**Average CCF**	**EAD post CRM and post-CCF**	**Average PD**	**Average LGD**	**Average maturity**	**RWA**	**RWA density**	**EL**	**Value adjust-ments and Provi-sions**
Retail – Secured by real estate non-SME	0.00 to <0.15	28,108	1,100	100%	29,795	0.06%	13.81%		2,102	7%	3	
	0.15 to <0.25	24,934	653	89%	25,500	0.22%	14.41%		1,646	6%	8	
	0.25 to <0.50	8,066	235	73%	8,128	0.41%	17.42%		1,014	12%	6	
	0.50 to <0.75	11,883	437	84%	12,673	0.62%	10.64%		1,263	10%	8	
	0.75 to <2.50	20,746	691	85%	20,843	1.45%	10.35%		3,547	17%	28	
	2.50 to <10.00	6,427	129	93%	6,530	4.80%	12.37%		2,607	40%	36	
	10.00 to <100.00	998	16	99%	1,010	18.16%	9.55%		546	54%	19	
	100.00 (default)	1,379	3	83%	783	100.00%	40.96%		1,569	200%	253	
	Subtotal	**102,540**	**3,265**	**90%**	**105,261**	**1.68%**	**13.24%**		**14,294**	**14%**	**361**	**(351)**
Retail – Qualifying revolving	0.00 to <0.15	77	1,153	38%	618	0.10%	42.83%		19	3%	0	
	0.15 to <0.25		251	40%	100	0.23%	35.31%		4	4%	0	
	0.25 to <0.50	91	195	38%	313	0.41%	48.36%		31	10%	1	
	0.50 to <0.75	106	555	36%	307	0.60%	35.90%		30	10%	1	
	0.75 to <2.50	353	497	37%	760	1.47%	43.37%		174	23%	5	
	2.50 to <10.00	656	253	37%	1,236	4.78%	45.23%		803	65%	27	
	10.00 to <100.00	365	29	37%	430	21.45%	42.73%		466	108%	38	
	100.00 (default)	300	7	7%	300	100.00%	64.59%		213	71%	182	
	Subtotal	**1,948**	**2,940**	**37%**	**4,064**	**11.48%**	**44.97%**		**1,740**	**43%**	**253**	**(235)**
Retail – Other SME	0.00 to <0.15	85	7	16%	89	0.06%	14.59%		184	207%	0	
	0.15 to <0.25	16	7	6%	17	0.23%	29.09%		2	11%	0	
	0.25 to <0.50	3,125	438	39%	3,296	0.38%	18.30%		298	9%	2	
	0.50 to <0.75	2,989	29	73%	2,969	0.57%	19.54%		363	12%	3	
	0.75 to <2.50	9,338	524	52%	9,618	1.45%	22.97%		2,069	22%	33	
	2.50 to <10.00	4,183	202	55%	4,304	4.87%	24.73%		1,648	38%	53	
	10.00 to <100.00	1,008	109	54%	1,089	20.09%	26.92%		496	46%	58	
	100.00 (default)	1,472	13	9%	1,469	100.00%	41.78%		595	41%	819	
	Subtotal	**22,215**	**1,330**	**48%**	**22,850**	**9.04%**	**23.55%**		**5,654**	**25%**	**968**	**(1,007)**
Retail – Other non – SME	0.00 to <0.15	1,698	165	23%	1,738	0.09%	17.52%		89	5%	0	
	0.15 to <0.25	6,678	981	99%	6,717	0.20%	13.69%		384	6%	2	
	0.25 to <0.50	4,562	548	90%	5,015	0.38%	31.13%		984	20%	6	
	0.50 to <0.75	1,414	98	99%	2,453	0.62%	36.21%		759	31%	6	
	0.75 to <2.50	7,924	370	82%	8,205	1.37%	33.17%		3,253	40%	38	
	2.50 to <10.00	5,490	241	78%	5,676	4.24%	34.16%		3,081	54%	83	
	10.00 to <100.00	1,241	20	90%	1,257	24.90%	34.52%		993	79%	103	
	100.00 (default)	1,825	10	72%	1,829	100.00%	47.73%		400	22%	1,044	
	Subtotal	**30,832**	**2,433**	**88%**	**32,891**	**7.74%**	**29.31%**		**9,943**	**30%**	**1,281**	**(1,302)**
SPECIALISED LENDING SLOTTING CRITERIA	**Subtotal**	**690**	**2,101**		**1,442**				**795**	**55%**	**13**	**(5)**
OTHER NON CREDIT-OBLIGATION ASSETS	**Subtotal**	**830**			**830**				**115**	**14%**	**7**	**-**
SECURITISATION POSITIONS	**Subtotal**	**14,836**	**19,705**		**34,241**				**5,184**	**15%**	**0**	**-**
EQUITY	**Subtotal**	**6,274**			**6,274**				**21,942**	**350%**	**132**	**-**
TOTAL		**617,207**	**217,297**	**44%**	**726,625**	**2.37%**	**15.11%**	**1.85**	**163,428**	**22%**	**6,925**	**(7,312)**

		31.12.2019										
(In EURm)	**PD scale**	**Original on-balance sheet gross exposure**	**Off-balance sheet exposures pre-CCF**	**Average CCF**	**EAD post CRM and post-CCF**	**Average PD**	**Average LGD**	**Average maturity**	**RWA**	**RWA density**	**EL**	**Value adjust-ments and Provi-sions**
Central governments and central banks	0.00 to <0.15	147,518	1,692	64%	173,727	0.01%	3.22%	1.50	1,742	1%	3	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	1,618	23	75%	3,174	0.26%	16.07%	2.93	681	21%	1	
	0.50 to <0.75	13,998	-		2,307	0.50%	30.02%	1.61	1,084	47%	3	
	0.75 to <2.50	1,946	877	75%	2,042	1.79%	24.64%	2.65	996	49%	9	
	2.50 to <10.00	1,854	722	67%	1,025	4.40%	18.22%	3.12	649	63%	9	
	10.00 to <100.00	297	410	50%	237	11.78%	19.73%	1.94	222	94%	6	
	100.00 (default)	115	0	75%	70	100.00%	77.99%	1.49	21	30%	61	
	Subtotal	**167,346**	**3,724**	**66%**	**182,582**	**0.12%**	**4.15%**	**1.55**	**5,396**	**3%**	**93**	**(70)**
Institutions	0.00 to <0.15	25,538	8,090	62%	37,548	0.04%	12.72%	2.46	2,111	6%	3	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	509	636	60%	922	0.26%	24.66%	1.97	229	25%	1	
	0.50 to <0.75	6,093	1,608	8%	732	0.50%	32.32%	1.66	321	44%	1	
	0.75 to <2.50	3,656	967	53%	1,682	1.50%	19.00%	1.59	822	49%	5	
	2.50 to <10.00	1,248	602	33%	764	4.03%	24.64%	1.21	578	76%	7	
	10.00 to <100.00	245	214	38%	170	15.20%	11.79%	1.27	191	113%	6	
	100.00 (default)	47	0	89%	46	100.00%	29.09%	4.23	49	106%	13	
	Subtotal	**37,336**	**12,116**	**52%**	**41,864**	**0.36%**	**14.01%**	**2.37**	**4,302**	**10%**	**35**	**(62)**
Corporate – SME	0.00 to <0.15	752	590	52%	1,274	0.09%	35.87%	2.47	236	19%	2	
	0.15 to <0.25	3,358	500	93%	3,872	0.20%	12.36%	1.05	285	7%	1	
	0.25 to <0.50	1,383	773	49%	1,775	0.28%	37.03%	2.16	614	35%	2	
	0.50 to <0.75	3,836	1,006	48%	3,169	0.51%	33.22%	2.43	1,365	43%	5	
	0.75 to <2.50	9,948	2,421	46%	11,174	1.48%	27.76%	3.34	6,544	59%	47	
	2.50 to <10.00	7,947	1,221	58%	8,876	4.56%	30.24%	2.48	7,055	79%	121	
	10.00 to <100.00	2,349	204	48%	2,500	17.14%	27.01%	2.35	2,558	102%	113	
	100.00 (default)	1,408	167	40%	1,459	100.00%	38.99%	2.04	1,126	77%	689	
	Subtotal	**30,981**	**6,883**	**53%**	**34,099**	**7.30%**	**28.38%**	**2.55**	**19,784**	**58%**	**980**	**(918)**
Corporate – Specialised lending	0.00 to <0.15	5,223	2,911	35%	10,924	0.07%	17.89%	2.94	1,099	10%	1	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	3,268	2,096	40%	3,696	0.26%	14.49%	2.68	652	18%	1	
	0.50 to <0.75	7,727	2,274	50%	8,947	0.50%	13.45%	3.65	2,268	25%	6	
	0.75 to <2.50	15,826	7,114	40%	13,464	1.51%	13.50%	3.22	5,336	40%	32	
	2.50 to <10.00	8,377	3,031	37%	5,811	4.07%	14.80%	2.80	3,183	55%	39	
	10.00 to <100.00	469	56	49%	215	13.76%	17.95%	2.43	180	83%	5	
	100.00 (default)	668	32	60%	602	100.00%	35.87%	2.20	33	5%	359	
	Subtotal	**41,560**	**17,514**	**40%**	**43,660**	**2.60%**	**15.16%**	**3.12**	**12,751**	**29%**	**443**	**(446)**
Corporate – Other	0.00 to <0.15	19,116	73,155	46%	60,138	0.07%	32.54%	2.50	10,048	17%	13	
	0.15 to <0.25	12	2	53%	12	0.16%	33.35%	3.21	4	32%	0	
	0.25 to <0.50	7,629	20,631	44%	15,774	0.26%	30.98%	2.45	5,689	36%	13	
	0.50 to <0.75	21,101	9,581	59%	13,715	0.50%	27.63%	2.39	5,831	43%	18	
	0.75 to <2.50	21,775	16,420	44%	26,166	1.55%	24.82%	2.31	15,695	60%	102	
	2.50 to <10.00	12,024	7,798	46%	15,528	4.25%	26.22%	2.18	13,195	85%	178	
	10.00 to <100.00	2,419	932	39%	2,186	15.35%	27.55%	2.09	2,912	133%	93	
	100.00 (default)	2,512	717	50%	2,703	100.00%	34.90%	1.76	1,333	49%	1,258	
	Subtotal	**86,588**	**129,237**	**47%**	**136,223**	**3.12%**	**29.60%**	**2.39**	**54,707**	**40%**	**1,676**	**(1,717)**
Retail – Secured by real estate SME	0.00 to <0.15	17	5	100%	80	0.03%	11.73%		31	39%	0	
	0.15 to <0.25	0	-		0	0.19%	15.74%		0	5%	0	
	0.25 to <0.50	863	13	100%	876	0.27%	16.19%		57	7%	0	
	0.50 to <0.75	1,606	26	100%	1,592	0.62%	9.65%		112	7%	1	
	0.75 to <2.50	2,428	39	100%	2,503	1.11%	13.91%		368	15%	4	
	2.50 to <10.00	754	13	100%	767	3.02%	14.75%		224	29%	3	
	10.00 to <100.00	360	9	100%	369	16.05%	10.17%		163	44%	7	
	100.00 (default)	260	0	100%	207	100.00%	44.17%		191	92%	98	
	Subtotal	**6,288**	**105**	**100%**	**6,393**	**5.15%**	**14.00%**		**1,146**	**18%**	**113**	**(106)**

		31.12.2019										
(In EURm)	**PD scale**	**Original on-balance sheet gross exposure**	**Off-balance sheet exposures pre-CCF**	**Average CCF**	**EAD post CRM and post-CCF**	**Average PD**	**Average LGD**	**Average maturity**	**RWA**	**RWA density**	**EL**	**Value adjust-ments and Provi-sions**
Retail – Secured by real estate non-SME	0.00 to <0.15	24,742	984	100%	26,897	0.06%	13.85%		2,077	8%	2	
	0.15 to <0.25	22,289	632	88%	22,815	0.22%	14.35%		1,481	6%	7	
	0.25 to <0.50	7,625	229	74%	7,686	0.41%	17.59%		977	13%	6	
	0.50 to <0.75	12,527	508	83%	12,510	0.62%	10.52%		1,247	10%	8	
	0.75 to <2.50	23,467	866	89%	24,179	1.44%	10.62%		4,250	18%	33	
	2.50 to <10.00	7,620	156	94%	7,755	4.94%	12.17%		3,141	41%	43	
	10.00 to <100.00	1,403	34	99%	1,431	17.93%	9.19%		758	53%	26	
	100.00 (default)	1,795	3	97%	1,092	100.00%	42.12%		1,128	103%	448	
	Subtotal	**101,467**	**3,412**	**91%**	**104,366**	**2.16%**	**13.19%**		**15,060**	**14%**	**573**	**(559)**
Retail – Qualifying revolving	0.00 to <0.15	62	1,111	38%	607	0.10%	43.03%		16	3%	0	
	0.15 to <0.25	0	286	41%	118	0.23%	35.70%		5	5%	0	
	0.25 to <0.50	87	232	37%	356	0.42%	48.77%		36	10%	1	
	0.50 to <0.75	108	604	37%	331	0.60%	36.14%		33	10%	1	
	0.75 to <2.50	359	567	37%	871	1.48%	44.18%		207	24%	6	
	2.50 to <10.00	729	307	38%	1,537	4.77%	45.85%		1,036	67%	33	
	10.00 to <100.00	456	36	37%	569	21.77%	43.54%		641	113%	52	
	100.00 (default)	403	8	38%	405	100.00%	61.04%		196	48%	248	
	Subtotal	**2,203**	**3,150**	**38%**	**4,794**	**12.93%**	**45.50%**		**2,170**	**45%**	**340**	**(315)**
Retail – Other SME	0.00 to <0.15	35	1	100%	36	0.03%	7.90%		0	1%	0	
	0.15 to <0.25	15	6	10%	15	0.24%	31.01%		2	11%	0	
	0.25 to <0.50	1,291	357	49%	1,530	0.36%	29.93%		224	15%	2	
	0.50 to <0.75	1,382	29	73%	1,320	0.57%	31.86%		263	20%	2	
	0.75 to <2.50	8,518	596	66%	8,968	1.46%	24.91%		2,101	23%	34	
	2.50 to <10.00	4,229	235	65%	4,464	5.00%	28.79%		2,015	45%	65	
	10.00 to <100.00	1,465	195	75%	1,680	19.16%	34.00%		952	57%	107	
	100.00 (default)	1,551	16	84%	1,565	100.00%	47.77%		553	35%	981	
	Subtotal	**18,485**	**1,435**	**63%**	**19,577**	**11.52%**	**29.24%**		**6,110**	**31%**	**1,192**	**(1,151)**
Retail – Other non – SME	0.00 to <0.15	1,573	125	100%	1,807	0.09%	18.46%		84	5%	0	
	0.15 to <0.25	6,463	1,267	99%	7,708	0.20%	13.30%		432	6%	2	
	0.25 to <0.50	4,304	546	100%	4,921	0.38%	30.24%		935	19%	5	
	0.50 to <0.75	2,510	102	100%	2,612	0.60%	37.46%		816	31%	6	
	0.75 to <2.50	7,769	892	100%	8,732	1.34%	32.06%		3,344	38%	39	
	2.50 to <10.00	5,824	229	100%	6,186	4.30%	33.30%		3,310	54%	90	
	10.00 to <100.00	1,383	36	58%	1,406	25.32%	33.67%		1,094	78%	114	
	100.00 (default)	1,851	9	96%	1,859	100.00%	49.82%		737	40%	1,018	
	Subtotal	**31,677**	**3,205**	**99%**	**35,231**	**7.52%**	**28.62%**		**10,752**	**31%**	**1,275**	**(1,245)**
SPECIALISED LENDING SLOTTING CRITERIA	**Subtotal**	**684**	**2,196**		**1,430**				**827**	**58%**	**10**	**(3)**
OTHER NON CREDIT-OBLIGATION ASSETS	**Subtotal**	**35**	**0**		**24**				**21**	**88%**	**0**	**-**
SECURITISATION POSITIONS	**Subtotal**	**6,612**	**24,588**		**30,978**				**3,695**	**12%**	**0**	**-**
EQUITY	**Subtotal**	**5,520**	**0**		**5,520**				**20,061**	**363%**	**129**	**-**
TOTAL		**536,782**	**207,565**	**43%**	**646,740**	**2.69%**	**16.84%**	**2.12**	**156,782**	**24%**	**6,859**	**(6,593)**

TABLE 57: INTERNAL APPROACH - CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (CR6) - FIRB

		31.12.2020										
(In EURm)	PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments and Provisions
Central governments and central banks	0.00 to <0.15	53	1	75%	64	0.01%	44.49%	2.50	6	10%	0	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	-	-		-				-		-	
	0.50 to <0.75	-	-		-				-		-	
	0.75 to <2.50	-	-		-				-		-	
	2.50 to <10.00	-	-		-				-		-	
	10.00 to <100.00	-	-		-				-		-	
	100.00 (default)	-	-		-				-		-	
	Subtotal	**53**	**1**	**75%**	**64**	**0.01%**	**44.49%**	**2.50**	**6**	**10%**	**0**	**(0)**
Institutions	0.00 to <0.15	2	0	0%	2	0.03%	44.86%	2.50	0	16%	0	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	0	-		0	0.26%	45.00%	2.50	0	53%	0	
	0.50 to <0.75	-	-		-				-		-	
	0.75 to <2.50	0	-		0	1.13%	45.00%	2.50	0	129%	0	
	2.50 to <10.00	0	-		0	3.30%	44.85%	2.50	0	139%	0	
	10.00 to <100.00	0	-		0	14.33%	40.00%	2.50	0	206%	0	
	100.00 (default)	-	-		-				-		-	
	Subtotal	**2**	**0**	**0%**	**2**	**0.13%**	**44.86%**	**2.50**	**0**	**20%**	**0**	**(0)**
Corporate – SME	0.00 to <0.15	40	6	46%	80	0.08%	42.84%	2.50	20	25%	0	
	0.15 to <0.25	36	10	75%	43	0.16%	43.31%	2.50	11	26%	0	
	0.25 to <0.50	89	5	75%	93	0.28%	42.79%	2.50	35	37%	0	
	0.50 to <0.75	199	18	75%	174	0.54%	42.71%	2.50	86	49%	0	
	0.75 to <2.50	477	43	75%	510	1.54%	42.78%	2.50	358	70%	3	
	2.50 to <10.00	678	37	75%	704	4.69%	42.96%	2.50	692	98%	14	
	10.00 to <100.00	208	5	75%	206	16.07%	42.92%	2.50	304	148%	14	
	100.00 (default)	103	1	75%	102	100.00%	43.99%	2.50	0	0%	45	
	Subtotal	**1,830**	**124**	**74%**	**1,911**	**9.26%**	**42.94%**	**2.50**	**1,506**	**79%**	**77**	**(80)**
Corporate – Other	0.00 to <0.15	1,038	6	75%	1,061	0.08%	44.25%	2.50	257	24%	0	
	0.15 to <0.25	1	0	75%	1	0.16%	44.38%	2.50	0	36%	0	
	0.25 to <0.50	123	8	75%	132	0.26%	42.70%	2.50	65	49%	0	
	0.50 to <0.75	452	13	75%	445	0.51%	43.53%	2.50	311	70%	1	
	0.75 to <2.50	509	18	75%	523	1.57%	43.43%	2.50	537	103%	4	
	2.50 to <10.00	832	47	75%	868	4.53%	43.20%	2.50	1,211	140%	17	
	10.00 to <100.00	175	4	78%	173	14.64%	43.00%	2.50	351	202%	11	
	100.00 (default)	53	0	75%	53	100.00%	44.19%	2.50	0	0%	23	
	Subtotal	**3,183**	**97**	**75%**	**3,255**	**3.97%**	**43.61%**	**2.50**	**2,733**	**84%**	**56**	**(69)**
ALTERNATIVE TREATMENT: SECURED BY REAL ESTATE	**Subtotal**	**398**	**-**	**100%**	**398**				**171**	**43%**	**-**	**-**
TOTAL		**5,466**	**222**	**74%**	**5,631**	**5.85%**	**43.38%**	**2.50**	**4,417**	**78%**	**134**	**(149)**

(In EURm)	PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments and Provisions
		31.12.2019										
Central governments and central banks	0.00 to <0.15	30	5	75%	46	0.02%	44.85%	2.50	0	0%	-	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	-	-		-				-		-	
	0.50 to <0.75	-	-		-				-		-	
	0.75 to <2.50	-	-		-				-		-	
	2.50 to <10.00	-	-		-				-		-	
	10.00 to <100.00	-	-		-				-		-	
	100.00 (default)	-	-		-				-		-	
	Subtotal	**30**	**5**	**75%**	**46**	**0.02%**	**44.85%**	**2.50**	**0**	**0%**	**-**	**(0)**
Institutions	0.00 to <0.15	4	0	75%	4	0.03%	44.68%	2.50	1	16%	0	
	0.15 to <0.25	-	-		-				-		-	
	0.25 to <0.50	0	-		0	0.26%	45.00%	2.50	0	53%	0	
	0.50 to <0.75	-	-		-	0.50%	45.00%	2.50	0	74%	0	
	0.75 to <2.50	0	-		0	1.10%	45.00%	2.50	0	2%	0	
	2.50 to <10.00	0	-		0	3.28%	44.70%	2.50	1	139%	0	
	10.00 to <100.00	0	-		0	14.33%	45.00%	2.50	0	232%	0	
	100.00 (default)	-	-		-				-		-	
	Subtotal	**5**	**0**	**75%**	**5**	**0.40%**	**44.69%**	**2.50**	**1**	**29%**	**0**	**(0)**
Corporate – SME	0.00 to <0.15	88	7	50%	92	0.12%	42.83%	2.50	1	2%	0	
	0.15 to <0.25	94	7	75%	99	0.16%	42.56%	2.50	29	30%	0	
	0.25 to <0.50	127	14	75%	137	0.27%	42.68%	2.50	55	40%	0	
	0.50 to <0.75	318	22	75%	332	0.53%	42.50%	2.50	183	55%	1	
	0.75 to <2.50	849	52	75%	890	1.54%	42.60%	2.50	693	78%	6	
	2.50 to <10.00	770	38	75%	792	4.37%	42.75%	2.50	855	108%	15	
	10.00 to <100.00	164	2	75%	160	16.09%	42.72%	2.50	250	156%	11	
	100.00 (default)	102	0	75%	100	100.00%	44.04%	2.50	-	-	44	
	Subtotal	**2,512**	**142**	**74%**	**2,603**	**6.79%**	**42.71%**	**2.50**	**2,067**	**79%**	**77**	**(66)**
Corporate – Other	0.00 to <0.15	955	48	75%	997	0.07%	44.02%	2.50	232	23%	0	
	0.15 to <0.25	3	0	75%	3	0.16%	42.27%	2.50	1	26%	0	
	0.25 to <0.50	165	10	75%	173	0.26%	43.90%	2.50	88	51%	0	
	0.50 to <0.75	548	13	75%	559	0.51%	43.43%	2.50	393	70%	1	
	0.75 to <2.50	632	47	75%	663	1.58%	43.21%	2.50	681	103%	5	
	2.50 to <10.00	636	21	75%	650	4.49%	43.15%	2.50	917	141%	13	
	10.00 to <100.00	86	1	75%	86	15.34%	43.37%	2.50	166	193%	6	
	100.00 (default)	66	0	75%	66	100.00%	43.93%	2.50	-	-	29	
	Subtotal	**3,091**	**140**	**75%**	**3,196**	**3.83%**	**43.54%**	**2.50**	**2,477**	**77%**	**53**	**(40)**
ALTERNATIVE TREATMENT: SECURED BY REAL ESTATE	**Subtotal**	**386**	**-**	**100%**	**386**				**179**	**46%**	**-**	**-**
TOTAL		**6,023**	**287**	**74%**	**6,237**	**5.12%**	**43.18%**	**2.50**	**4,725**	**76%**	**130**	**(107)**

TABLE 58: CREDIT RISK IN STANDARDISED APPROACH - EAD DISTRIBUTED BY RISK WEIGHT (CR5)

In accordance with the EBA's guidelines for revised Pillar 3 (EBA/GL/2016/11), amounts are presented without securitisation and contributions to default funds of central counterparties.

	31.12.2020															
(In EURm)	Risk Weight															
Exposure Class	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Other Risk Weight**	**Total**
Central governments or central banks	6,436	-	-	-	-	-	-	-	-	1,178	-	2,702	-	-	-	10,316
Regional governments or local authorities	94	-	-	-	615	-	1	-	-	70	-	-	-	-	0	780
Public sector entities	0	-	-	-	240	-	-	-	-	23	-	-	-	-	0	263
Multilateral Development Banks	1,436	-	-	-	-	-	20	-	-	23	-	-	-	-	-	1,479
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	5,053	1,617	17	-	11,750	-	203	-	-	505	0	-	-	-	22	19,169
Corporates	-	-	-	-	920	-	813	-	4	28,331	245	-	-	-	8	30,320
Retail	-	-	-	-	0	1,777	-	-	28,659	132	-	-	-	-	119	30,688
Secured by mortgages on immovable property	0	-	-	-	-	10,258	1,649	-	2,879	251	-	-	-	-	7	15,043
Exposures in default	-	-	-	-	-	-	-	-	-	1,810	702	-	-	-	379	2,891
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	369	-	-	-	-	369
Covered bonds	-	-	-	206	-	-	-	-	-	-	-	-	-	-	-	206
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	5
Equity exposures	3	-	-	-	-	-	-	-	-	668	-	10	-	-	293	974
Other exposures	1,914	-	-	-	456	-	2,776	-	-	17,284	0	-	-	-	6,581	29,012
TOTAL	**14,936**	**1,617**	**19**	**206**	**13,982**	**12,035**	**5,462**	**-**	**31,542**	**50,279**	**1,316**	**2,712**	**-**	**-**	**7,409**	**141,516**

(In EURm)	31.12.2019															
	Risk Weight															
Exposure Class	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Other Risk Weight**	**Total**
Central governments or central banks	4,025	-	-	-	2	-	83	-	-	1,108	-	2,732	-	-	-	7,949
Regional governments or local authorities	154	-	-	-	418	-	-	-	-	122	-	-	-	-	-	694
Public sector entities	-	-	-	-	340	-	-	-	-	52	-	-	-	-	-	393
Multilateral Development Banks	545	-	-	-	-	-	-	-	-	-	-	-	-	-	-	545
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	1,711	2,884	-	-	9,160	-	179	-	-	640	-	-	-	-	18	14,592
Corporates	-	-	-	-	716	-	1,321	-	326	32,485	332	-	-	-	977	36,158
Retail	-	-	-	-	17	1,496	-	-	30,974	350	-	-	-	-	63	32,899
Secured by mortgages on immovable property	-	-	-	-	-	9,043	1,465	-	2,903	177	-	-	-	-	1,149	14,736
Exposures in default	-	-	-	-	-	-	-	-	-	1,612	897	-	-	-	392	2,902
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	372	-	-	-	-	372
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	-	-	-	-	-	-	-	-	-	67	-	-	-	-	-	67
Equity exposures	3	-	-	-	-	-	-	-	-	657	-	503	-	-	472	1,636
Other exposures	1,039	-	58	-	644	-	1,979	-	-	15,663	1	-	-	-	10,281	29,664
TOTAL	**7,475**	**2,884**	**60**	**-**	**11,297**	**10,539**	**5,027**	**-**	**34,203**	**52,933**	**1,602**	**3,235**	**-**	**-**	**13,353**	**142,606**

TABLE 59: GEOGRAPHICAL BREAKDOWN OF NET EXPOSURES (CRB-C)

The EBA's recommendation to institutions for this table (EBA Guidelines 2016/11) is to report exposures only for material exposure classes, as described in EBA Guidelines 2014/14. Societe Generale opted not to present unused exposure classes.

In accordance with the EBA's guidelines for revised Pillar 3 (EBA/GL/2016/11), amounts are presented without securitisation, contributions to default funds of CCPs, as well as other non-credit obligation assets under the advanced approach.

	2020									
(In EURm)	France	United Kingdom	Germany	Italy	Luxem-bourg	Spain	Switzer-land	Other Western European countries	Czech Republic	Romania
Central governments or central banks	116,228	13,390	4,445	514	4,217	164	19,007	3,164	4,990	4,055
Institutions	24,187	2,257	390	396	660	85	198	1,659	1,735	18
Corporates	134,680	13,723	12,671	9,726	7,546	7,185	8,168	21,359	15,720	171
Retail	143,076	245	2,919	5,448	773	40	817	1,611	14,787	1
Equity	5,378	14	16	13	393	0	6	157	49	21
TOTAL IRB APPROACH	**423,548**	**29,630**	**20,440**	**16,097**	**13,589**	**7,473**	**28,196**	**27,951**	**37,280**	**4,267**
Central governments or central banks	2,906	840	691	1,129	55	52	23	402	47	9
Regional governments or local authorities	216	4	60	23	-	41	0	2	3	185
Public sector entities	44	68	38	3	-	31	4	6	13	2
Multilateral Development Banks	1,355	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-
Institutions	2,992	813	1,216	191	30	604	170	336	2	3
Corporates	13,784	1,691	1,870	1,598	590	635	243	2,209	1,532	2,451
Retail	22,283	1,692	6,422	1,720	90	598	262	1,272	923	3,198
Secured by mortgages on immovable property	3,635	1,970	1,684	7	0	11	13	39	11	1,954
Exposures in default	717	171	190	104	5	36	7	409	71	90
Items associated with particularly high risk	61	-	-	-	-	-	-	-	-	23
Covered bonds	-	206	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	0	-	-	-	-	-	-	-	-	5
Equity exposures	302	49	3	3	8	-	93	273	-	4
Other exposures	10,960	1,934	2,579	2,079	1,613	1,501	144	3,491	784	398
TOTAL SA APPROACH	**59,253**	**9,438**	**14,753**	**6,857**	**2,390**	**3,509**	**958**	**8,440**	**3,386**	**8,322**
TOTAL	**482,802**	**39,067**	**35,194**	**22,954**	**15,979**	**10,982**	**29,155**	**36,391**	**40,666**	**12,589**

	2020									
(In EURm)	Other Eastern European countries EU	Russia	Other Eastern European countries excluding EU	United States	Other countries of North America	Latin America and Caribbean	Africa and Middle East	Japan	Asia-Pacific	Total
Central governments or central banks	678	2,091	573	36,202	202	992	11,641	11,640	3,983	238,177
Institutions	323	167	1,515	7,202	1,264	362	2,161	723	4,693	49,994
Corporates	2,524	3,155	3,225	50,566	3,039	9,100	10,879	1,216	17,707	332,360
Retail	25	38	23	21	10	48	612	2	58	170,554
Equity	8	15	0	3	37	4	129	-	31	6,274
TOTAL IRB APPROACH	**3,558**	**5,466**	**5,336**	**93,994**	**4,552**	**10,506**	**25,422**	**13,581**	**26,472**	**797,359**
Central governments or central banks	50	24	1	678	87	71	1,358	31	74	8,527
Regional governments or local authorities	1	34	-	0	-	-	3	-	-	570
Public sector entities	6	19	-	39	0	-	18	-	-	290
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	1,355
International Organisations	-	-	-	-	-	-	-	-	-	-
Institutions	29	417	7	4,623	22	12	41	1,074	944	13,525
Corporates	1,398	5,754	287	884	22	223	11,570	1	389	47,130
Retail	420	2,997	7	97	7	23	5,022	1	108	47,144
Secured by mortgages on immovable property	211	2,872	0	8	5	1	2,849	-	3	15,273
Exposures in default	41	103	0	10	2	126	951	0	7	3,040
Items associated with particularly high risk	-	-	-	-	-	-	396	-	-	480
Covered bonds	-	-	-	-	-	-	-	-	-	206
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	-	-	-	-	-	-	-	-	-	5
Equity exposures	-	-	-	237	-	-	-	2	0	974
Other exposures	329	529	237	487	25	209	1,272	41	403	29,012
TOTAL SA APPROACH	**2,485**	**12,749**	**539**	**7,062**	**170**	**664**	**23,479**	**1,148**	**1,929**	**167,532**
TOTAL	**6,043**	**18,215**	**5,876**	**101,057**	**4,722**	**11,170**	**48,901**	**14,729**	**28,401**	**964,892**

	2019									
(In EURm)	**France**	**United Kingdom**	**Germany**	**Italy**	**Luxembourg**	**Spain**	**Switzer-land**	**Other Western European countries**	**Czech Republic**	**Romania**
Central governments or central banks	64,954	3,680	4,306	498	4,333	124	11,744	3,138	3,703	3,452
Institutions	22,382	2,043	237	141	815	913	385	1,633	1,392	1
Corporates	123,438	10,966	11,208	8,336	7,491	7,285	7,712	20,609	15,373	282
Retail	140,255	1,715	3,131	5,238	163	49	921	711	14,163	1
Equity	4,774	13	11	1	360	0	5	103	43	13
TOTAL IRB APPROACH	**355,802**	**18,416**	**18,894**	**14,213**	**13,162**	**8,372**	**20,768**	**26,193**	**34,673**	**3,748**
Central governments or central banks	3,399	864	389	938	23	72	64	163	5	26
Regional governments or local authorities	249	1	36	25	-	46	0	32	2	197
Public sector entities	46	75	42	3	-	19	6	93	12	4
Multilateral Development Banks	375	47	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-
Institutions	1,913	1,026	553	60	9	315	50	228	3	4
Corporates	18,731	1,048	2,128	1,995	546	626	266	4,065	1,488	2,541
Retail	20,822	2,044	6,552	1,748	4	587	297	1,025	1,022	2,440
Secured by mortgages on immovable property	4,062	352	1,536	3	0	2	7	1	20	2,839
Exposures in default	938	51	144	109	1	34	4	592	46	103
Items associated with particularly high risk	97	-	-	-	-	-	-	-	-	1
Covered bonds	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	21	6	-	4	24	0	0	7	-	-
Equity exposures	679	48	7	14	8	-	83	274	-	6
Other exposures	11,212	1,858	2,448	2,595	786	1,561	181	3,139	862	432
TOTAL SA APPROACH	**62,543**	**7,420**	**13,833**	**7,495**	**1,400**	**3,263**	**959**	**9,617**	**3,460**	**8,593**
TOTAL	**418,345**	**25,836**	**32,727**	**21,708**	**14,562**	**11,635**	**21,727**	**35,810**	**38,132**	**12,341**

(In EURm)	2019									
	Other Eastern European countries EU	**Russia**	**Other Eastern European countries excluding EU**	**United States**	**Other countries of North America**	**Latin America and Caribbean**	**Africa and Middle East**	**Japan**	**Asia-Pacific**	**Total**
Central governments or central banks	896	2,521	556	38,696	201	1,311	10,425	12,736	3,764	171,036
Institutions	664	98	1,646	7,810	1,013	327	2,514	335	5,047	49,397
Corporates	2,853	2,964	3,872	52,244	2,826	9,172	11,179	1,782	19,129	318,720
Retail	25	73	92	22	5	46	1,293	4	143	168,050
Equity	6	23	-	3	90	5	59	-	14	5,520
TOTAL IRB APPROACH	**4,444**	**5,679**	**6,166**	**98,774**	**4,134**	**10,860**	**25,470**	**14,857**	**28,097**	**712,722**
Central governments or central banks	54	16	2	536	3	115	1,172	16	68	7,923
Regional governments or local authorities	2	34	-	0	80	-	16	-	-	720
Public sector entities	0	23	-	62	-	-	36	-	-	421
Multilateral Development Banks	-	21	-	-	-	-	-	-	-	443
International Organisations	-	-	-	-	-	-	-	-	-	-
Institutions	72	643	3	5,509	150	343	197	252	569	11,899
Corporates	1,630	6,658	251	1,288	79	342	12,546	1	270	56,500
Retail	473	4,118	10	130	12	23	5,008	1	113	46,427
Secured by mortgages on immovable property	0	3,275	0	1	0	5	2,955	0	11	15,069
Exposures in default	37	108	2	9	1	10	1,083	0	2	3,274
Items associated with particularly high risk	-	-	-	-	-	-	352	-	-	450
Covered bonds	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	0	-	-	4	0	0	3	-	0	69
Equity exposures	2	-	-	430	4	-	61	2	19	1,636
Other exposures	336	768	242	720	21	390	1,197	49	868	29,664
TOTAL SA APPROACH	**2,607**	**15,664**	**511**	**8,689**	**349**	**1,228**	**24,626**	**320**	**1,920**	**174,496**
TOTAL	**7,051**	**21,344**	**6,676**	**107,463**	**4,484**	**12,088**	**50,096**	**15,177**	**30,017**	**887,218**

TABLE 60: CONCENTRATION OF EXPOSURES BY INDUSTRY OR COUNTERPARTY TYPE (CRB-D)

	31.12.2020													
(In EURm)	Finance & Insurance	Real estate	Public adminis-tration	Food & agri-culture	Cons-umer goods	Chemi-cals, rubber, plastics	Retail trade	Whole-sale trade	Cons-truction	Trans-port equip. Manuf.	Education and asso-ciative activities	Hotels and catering	Auto-mobiles	Machinery and equipment
Central governments and central banks	3,567	-	231,493	-	-	-	-	-	-	-	411	-	-	-
Institutions	28,008	20	17,156	-	-	-	0	13	6	-	3	3	-	-
Corporates	39,742	33,770	2,006	12,081	8,211	6,252	15,015	25,067	15,370	6,816	458	5,732	11,831	15,498
Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity Exposures IRB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL IRB APPROACH	**71,317**	**33,789**	**250,655**	**12,081**	**8,211**	**6,252**	**15,016**	**25,080**	**15,377**	**6,816**	**872**	**5,735**	**11,831**	**15,498**
Central governments or central banks	323	0	3,669	-	1	-	-	-	0	-	1	-	-	-
Regional governments or local authorities	0	12	407	-	-	-	-	15	0	-	6	0	-	-
Public sector entities	2	0	100	0	-	-	3	0	2	-	50	0	-	-
Multilateral developments banks	1,355	-	-	-	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	11,258	0	1,862	-	-	-	0	-	-	-	-	-	137	-
Corporates	7,582	1,186	49	2,855	1,086	1,096	4,503	5,305	3,218	206	965	795	813	1,541
Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secured by mortgages on immovable property	6	1,238	0	132	39	19	75	154	43	-	155	69	1	5
Exposures in default	12	36	8	89	43	17	102	146	119	6	11	68	19	19
Items associated with particularly high risk	-	478	-	-	-	-	-	0	-	-	-	3	-	-
Covered bonds	206	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims in the form of CIU	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other items	234	36	71	136	250	101	204	525	252	68	14	27	42	303
TOTAL SA APPROACH	**20,978**	**2,985**	**6,167**	**3,212**	**1,420**	**1,235**	**4,887**	**6,145**	**3,635**	**280**	**1,201**	**962**	**1,011**	**1,868**
TOTAL	**92,296**	**36,774**	**256,822**	**15,294**	**9,631**	**7,487**	**19,903**	**31,225**	**19,012**	**7,095**	**2,073**	**6,697**	**12,841**	**17,366**

	31.12.2020												
(In EURm)	**Wood and paper industry**	**Metals, minerals**	**Media**	**Oil and Gas**	**Health, social services**	**Business services (including conglo-merates)**	**Collective services**	**Personal and domestic Services**	**Telecoms**	**Transport & logistics**	**Retail**	**Others**	**Total**
Central governments and central banks	-	-	-	-	1,731	2	-	0	126	-	-	846	238,177
Institutions	-	-	-	-	29	405	532	-	-	702	-	3,117	49,994
Corporates	981	10,572	3,324	23,024	2,140	38,120	22,969	194	10,722	22,170	-	295	332,360
Retail	-	-	-	-	-	-	-	-	-	-	170,554	-	170,554
Equity Exposures IRB	-	-	-	-	-	-	-	-	-	-	-	6,274	6,274
TOTAL IRB APPROACH	**981**	**10,572**	**3,324**	**23,024**	**3,901**	**38,527**	**23,501**	**195**	**10,847**	**22,871**	**170,554**	**10,531**	**797,359**
Central governments or central banks	-	-	-	0	5	2	0	-	-	10	-	4,516	8,527
Regional governments or local authorities	-	-	0	-	30	12	1	0	-	69	-	19	570
Public sector entities	-	-	0	-	72	53	2	0	0	5	-	1	290
Multilateral developments banks	-	-	-	-	-	-	-	-	-	-	-	-	1,355
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	20	0	-	-	-	-	249	13,525
Corporates	428	3,413	395	1,039	1,263	3,418	2,333	117	881	2,426	-	217	47,130
Retail	-	-	-	-	-	-	-	-	-	-	47,144	-	47,144
Secured by mortgages immovable property	33	31	10	4	116	77	31	4	6	36	12,987	-	15,273
Exposures in default	9	45	7	3	12	68	27	3	1	86	-	2,083	3,040
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	480
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	206
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims in the form of CIU	-	-	-	-	-	-	-	-	-	-	-	5	5
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	974	974
Other items	19	101	64	67	42	716	245	7	127	178	-	25,182	29,012
TOTAL SA APPROACH	**489**	**3,590**	**476**	**1,113**	**1,541**	**4,365**	**2,639**	**132**	**1,015**	**2,810**	**60,131**	**33,245**	**167,532**
TOTAL	**1,470**	**14,162**	**3,801**	**24,136**	**5,441**	**42,892**	**26,140**	**327**	**11,863**	**25,681**	**230,685**	**43,776**	**964,892**

	31.12.2019													
(In EURm)	**Finance & Insurance**	**Real estate**	**Public adminis-tration**	**Food & agri-culture**	**Cons-umer goods**	**Chemi-cals, rubber, plastics**	**Retail trade**	**Whole-sale trade**	**Cons-truction**	**Trans-port equip. Manuf.**	**Education and asso-ciative activities**	**Hotels and catering**	**Auto-mobiles**	**Machinery and equip-ment**
Central governments and central banks	4,884	-	162,891	-	-	-	-	-	-	-	112	-	-	-
Institutions	31,301	143	13,950	-	-	-	0	-	8	-	4	4	71	-
Corporates	40,610	31,697	3,604	12,090	6,131	6,257	14,639	23,428	15,267	5,762	394	4,793	10,199	12,848
Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity Exposures IRB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL IRB APPROACH	**76,795**	**31,840**	**180,444**	**12,090**	**6,131**	**6,257**	**14,640**	**23,428**	**15,274**	**5,762**	**510**	**4,796**	**10,270**	**12,848**
Central governments or central banks	10	0	2,914	-	-	-	-	-	0	-	3	0	-	-
Regional governments or local authorities	0	14	485	0	-	-	-	-	0	-	15	0	-	0
Public sector entities	4	48	137	0	-	-	0	0	0	-	64	1	-	-
Multilateral developments banks	443	-	-	-	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	10,305	-	610	-	-	-	-	-	-	-	0	-	180	-
Corporates	7,299	3,510	105	3,826	1,171	1,520	5,176	5,154	3,311	686	1,211	828	1,109	1,965
Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secured by mortgages on immovable property	9	1,163	0	73	33	12	92	138	67	0	68	77	2	16
Exposures in default	4	103	3	107	29	17	115	173	185	8	5	67	5	22
Items associated with particularly high risk	0	434	-	0	0	-	-	1	5	-	-	1	-	-
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims in the form of CIU	69	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other items	1	0	32	3	2	2	11	7	2	0	2	0	2	3
TOTAL SA APPROACH	**18,145**	**5,273**	**4,287**	**4,009**	**1,236**	**1,552**	**5,394**	**5,472**	**3,570**	**694**	**1,368**	**975**	**1,297**	**2,007**
TOTAL	**94,940**	**37,113**	**184,731**	**16,099**	**7,367**	**7,809**	**20,033**	**28,901**	**18,845**	**6,456**	**1,878**	**5,771**	**11,567**	**14,855**

	31.12.2019												
(In EURm)	**Wood and paper industry**	**Metals, minerals**	**Media**	**Oil and Gas**	**Health, social services**	**Business services (including conglo-merates)**	**Collective services**	**Personal and domestic Services**	**Telecoms**	**Transport & logistics**	**Retail**	**Others**	**Total**
Central governments and central banks	-	(0)	(0)	-	1,789	236	(0)	1	-	-	-	1,124	171,036
Institutions	-	-	-	(0)	34	811	468	0	33	693	-	1,877	49,397
Corporates	932	10,639	3,428	24,794	1,771	36,611	21,500	167	9,553	21,495	-	109	318,720
Retail	-	-	-	-	-	-	-	-	-	-	168,050	-	168,050
Equity Exposures IRB	-	-	-	-	-	-	-	-	-	-	-	5,520	5,520
TOTAL IRB APPROACH	**932**	**10,639**	**3,428**	**24,794**	**3,594**	**37,658**	**21,968**	**168**	**9,587**	**22,188**	**168,050**	**8,630**	**712,722**
Central governments or central banks	-	-	-	-	27	0	-	-	-	-	-	4,968	7,923
Regional governments or local authorities	-	-	0	-	61	11	1	-	-	66	-	67	720
Public sector entities	-	-	0	-	86	70	6	0	0	5	-	0	421
Multilateral developments banks	-	-	-	-	-	-	-	-	-	-	-	-	443
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	20	-	-	-	-	-	783	11,899
Corporates	627	3,282	532	1,120	1,517	5,063	3,188	119	1,077	2,795	-	309	56,500
Retail	-	-	-	-	-	-	-	-	-	-	46,427	-	46,427
Secured by mortgages immovable property	8	84	5	1	106	93	13	4	6	30	12,970	-	15,069
Exposures in default	9	55	9	1	7	61	38	3	12	50	-	2,185	3,274
Items associated with particularly high risk	-	-	-	-	-	8	-	0	-	-	-	-	450
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims in the form of CIU	-	-	-	-	-	-	-	-	-	-	-	-	69
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	1,636	1,636
Other items	0	3	0	0	2	24	0	0	0	7	-	29,560	29,664
TOTAL SA APPROACH	**644**	**3,424**	**547**	**1,122**	**1,805**	**5,351**	**3,246**	**126**	**1,095**	**2,952**	**59,397**	**39,508**	**174,496**
TOTAL	**1,577**	**14,063**	**3,975**	**25,916**	**5,399**	**43,009**	**25,214**	**293**	**10,681**	**25,140**	**227,447**	**48,138**	**887,218**

TABLE 61: MATURITY OF EXPOSURES (CRB-E)

The exposures are presented without retail portfolio.

As at 31 December 2020, 45% of the total net exposure to credit risk (excluding retail exposures) has a maturity that is lower than one year (compared with 36% in 2019) and 36% has a maturity comprised between one and five years (compared with 42% in 2019).

	31.12.2020				
	Net exposure value				
(In EURm)	**<= 1 year**	**> 1 year <= 5 years**	**> 5 years**	**No stated maturity**	**Total**
Central governments and central banks	182,873	35,402	19,902	-	238,177
Institutions	20,133	16,091	13,769	-	49,994
Corporates	92,459	179,678	60,224	-	332,360
Equity Exposures IRB	-	-	-	6,274	6,274
TOTAL IRB APPROACH	**295,466**	**231,171**	**93,895**	**6,274**	**626,805**
Central governments or central banks	1,844	6,367	317	-	8,527
Regional governments or local authorities	107	237	226	-	570
Public sector entities	84	150	56	-	290
Multilateral developments banks	111	1,080	164	-	1,355
International Organisations	-	-	-	-	-
Institutions	7,723	5,782	20	-	13,525
Corporates	22,317	18,487	6,326	-	47,130
Exposures in default	934	1,625	481	-	3,040
Items associated with particularly high risk	147	309	24	-	480
Covered bonds	18	189	-	-	206
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-
Claims in the form of CIU	-	5	-	-	5
Equity exposures	-	-	-	974	974
Other items	-	-	-	29,012	29,012
TOTAL SA APPROACH	**33,286**	**34,230**	**7,614**	**29,986**	**105,115**
TOTAL	**328,751**	**265,401**	**101,508**	**36,260**	**731,921**

	31.12.2019				
	Net exposure value				
(In EURm)	**<= 1 year**	**> 1 year <= 5 years**	**> 5 years**	**No stated maturity**	**Total**
Central governments and central banks	114,073	35,328	21,634	-	171,036
Institutions	20,003	15,782	13,612	-	49,397
Corporates	74,878	181,867	61,975	-	318,720
Equity Exposures IRB	-	-	-	5,520	5,520
TOTAL IRB APPROACH	**208,954**	**232,977**	**97,222**	**5,520**	**544,673**
Central governments or central banks	892	6,906	125	-	7,923
Regional governments or local authorities	132	322	266	-	720
Public sector entities	51	229	141	-	421
Multilateral developments banks	21	422	-	-	443
International Organisations	-	-	-	-	-
Institutions	1,549	10,323	27	-	11,899
Corporates	24,208	23,300	8,992	-	56,500
Exposures in default	569	2,479	226	-	3,274
Items associated with particularly high risk	149	240	62	-	450
Covered bonds	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-
Claims in the form of CIU	30	39	0	-	69
Equity exposures	-	-	-	1,636	1,636
Other items	-	-	-	29,664	29,664
TOTAL SA APPROACH	**27,601**	**44,261**	**9,838**	**31,300**	**113,000**
TOTAL	**236,554**	**277,238**	**107,060**	**36,821**	**657,672**

TABLE 62: CREDIT RISK MITIGATION TECHNIQUES – OVERVIEW (CR3)

	31.12.2020			
(In EURm)	**Exposures unsecured - Carrying amount**	**Exposures secured - Carrying amount**	**Exposures secured by collateral**	**Exposures secured by financial guarantees**
Total loans	442,980	262,058	104,775	157,282
Total debt securities	62,035	5,590	5,486	104
TOTAL EXPOSURES	**505,014**	**267,648**	**110,262**	**157,386**

The table as at 31 December 2019 has been modified as follows:

	31.12.2019			
(In EURm)	**Exposures unsecured - Carrying amount**	**Exposures secured - Carrying amount**	**Exposures secured by collateral**	**Exposures secured by financial guarantees**
Total loans	391,647	250,974	116,495	134,479
Total debt securities	63,907	3,225	3,225	-
TOTAL EXPOSURES	**455,555**	**254,200**	**119,720**	**134,479**

TABLE 63: IMPACT OF CREDIT RISK DERIVATIVES USED AS CRM TECHNIQUES ON RWA – IRB (CR7)

The following table excludes securitisation risk and features credit risk as well as counterparty credit risk without CVA charges and without exposures cleared through CCPs.

	31.12.2020	
(In EURm)	**Pre-credit derivatives**	**Actual RWAs**
EXPOSURES UNDER FIRB	**4,417**	**4,417**
Central governments and central banks	6	6
Institutions	0	0
Corporate - SME	1,506	1,506
Corporate - Specialised lending	-	-
Corporate - Other	2,903	2,903
EXPOSURES UNDER AIRB	**178,616**	**177,655**
Central governments and central banks	6,413	6,411
Institutions	7,659	7,645
Corporate - SME	19,326	19,326
Corporate - Specialised lending	14,715	14,715
Corporate - Other	75,771	74,825
Retail - Secured by real estate SME	1,037	1,037
Retail - Secured by real estate non-SME	14,302	14,302
Retail - Qualifying revolving	1,740	1,740
Retail - Other SME	5,654	5,654
Retail - Other non - SME	9,943	9,943
Equity exposures IRB	21,942	21,942
Other non credit-obligation assets	115	115
TOTAL	**183,033**	**182,071**

(In EURm)	31.12.2019	
	Pre-credit derivatives	Actual RWAs
EXPOSURES UNDER FIRB	**4,725**	**4,725**
Central governments and central banks	0	0
Institutions	1	1
Corporate - SME	2,067	2,067
Corporate - Specialised lending	-	-
Corporate - Other	2,656	2,656
EXPOSURES UNDER AIRB	**167,823**	**166,928**
Central governments and central banks	5,769	5,698
Institutions	7,235	7,195
Corporate - SME	19,992	19,992
Corporate - Specialised lending	13,898	13,897
Corporate - Other	65,598	64,817
Retail - Secured by real estate SME	1,146	1,146
Retail - Secured by real estate non-SME	15,069	15,069
Retail - Qualifying revolving	2,170	2,170
Retail - Other SME	6,110	6,110
Retail - Other non - SME	10,752	10,752
Equity exposures IRB	20,061	20,061
Other non credit-obligation assets	21	21
TOTAL	**172,548**	**171,653**

TABLE 64: SPECIALISED LENDING AND EQUITIES – INTERNAL APPROACH (CR10)

(In EURm)	31.12.2020						
	Specialised lending						
Regulatory categories	**Remaining maturity**	**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWAs**	**Expected losses**
Category 1	Less than 2.5 years	311	1,545	50%	844	404	-
	Equal to or more than 2.5 years	8	73	70%	23	16	0
Category 2	Less than 2.5 years	299	420	70%	479	289	2
	Equal to or more than 2.5 years	17	15	90%	21	19	0
Category 3	Less than 2.5 years	30	40	115%	46	46	1
	Equal to or more than 2.5 years	1	0	115%	1	1	0
Category 4	Less than 2.5 years	6	3	250%	7	13	1
	Equal to or more than 2.5 years	1	2	250%	3	7	0
Category 5	Less than 2.5 years	12	3	0%	12	-	6
	Equal to or more than 2.5 years	6	-	0%	6	-	3
TOTAL	**Less than 2.5 years**	**657**	**2,011**		**1,388**	**752**	**10**
	Equal to or more than 2.5 years	**32**	**90**		**53**	**43**	**3**
Equities under the simple risk-weighted approach							
Categories		**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWAs**	**Capital requirements**
Private equity exposures		351	-	190%	351	668	53
Exchange-traded equity exposures		25	-	290%	25	74	6
Other equity exposures		706	-	370%	706	2,614	209
TOTAL		**1,083**	**-**		**1,083**	**3,355**	**268**

The table as at 31 December 2019 has been modified as follows, in order to exclude from line “Other equity exposures” the shares in insurance entities weighted at 370% (Danish compromise):

(In EURm)	31.12.2019						
	Specialised lending						
Regulatory categories	**Remaining maturity**	**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWAs**	**Expected losses**
Category 1	Less than 2.5 years	292	1,615	50%	815	397	-
	Equal to or more than 2.5 years	34	104	70%	58	40	0
Category 2	Less than 2.5 years	280	361	70%	437	279	2
	Equal to or more than 2.5 years	18	40	90%	34	30	0
Category 3	Less than 2.5 years	35	72	115%	60	66	2
	Equal to or more than 2.5 years	1	1	115%	1	1	0
Category 4	Less than 2.5 years	6	2	250%	7	14	1
	Equal to or more than 2.5 years	-	0	250%	0	0	0
Category 5	Less than 2.5 years	18	1	0%	18	-	5
	Equal to or more than 2.5 years	-	1	0%	0	-	0
TOTAL	**Less than 2.5 years**	**631**	**2,051**		**1,337**	**756**	**9**
	Equal to or more than 2.5 years	**53**	**146**		**92**	**71**	**1**
Equities under the simple risk-weighted approach							
Categories		**On-balance sheet amount**	**Off-balance sheet amount**	**Risk weight**	**Exposure amount**	**RWAs**	**Capital requirements**
Private equity exposures		185	-	190%	185	352	28
Exchange-traded equity exposures		38	-	290%	38	111	9
Other equity exposures		728	-	370%	728	2,695	216
TOTAL		**952**	**-**		**952**	**3,158**	**253**

TABLE 65: RWA AND CAPITAL REQUIREMENTS FLOW STATEMENTS OF CREDIT RISK EXPOSURES UNDER IRB APPROACH (CR8)

(In EURm)	RWA amounts	Capital requirements
RWA as at end of previous reporting period (30.09.2020)	**166,167**	**13,293**
Asset size	(1,588)	(127)
Asset quality	(1,115)	(89)
Model updates	-	-
Methodology and policy	6,703	536
Acquisitions and disposals	(1,431)	(114)
Foreign exchange movements	(678)	(54)
Other	(213)	(17)
RWA as at end of reporting period (31.12.2020)	**167,845**	**13,428**

7

COUNTERPARTY CREDIT RISK

IN BRIEF

Counterparty credit risk is the risk of losses stemming from market operations, should a counterparty fail to meet its payment obligations. The future market value of the exposure and the counterparty's credit quality are uncertain and may vary over time as underlying market parameters change.

Counterparty credit risk covers the replacement risk resulting from the default of a counterparty, the CVA (Credit Valuation Adjustment) risk related to the adjustment to the value of the Group portfolio, and the risk over the central counterparties (CCP) following clearing of market transactions. It is also affected by the wrong-way risk.

Counterparty credit risk RWA at end 2020

EUR 26.3bn

(Counterparty credit risk RWA at end 2019: EUR 19.6bn)

7.1 LIMIT SETTING AND FRAMEWORK MONITORING

Main principles

Counterparty credit risk is framed through a set of limits that reflect the Group's appetite for risk. The Risk approval process follows the same fundamental principles as for Credit Risk:

- a system of delegation of competence, largely based on the internal rating of the counterparties, confers decision-making capacities to the risk units on the one hand and the customer monitoring sector on the other;
- the commercial monitoring sector and this risk unit must be independent of each other;
- the limits and internal rating set for each counterparty are proposed by the customer monitoring sector and validated by the dedicated risk unit in charge of the counterparty type. Individual limits are supplemented by stress test or nominal frameworks to capture the impact of certain risk factors that are more difficult to measure.

These limits are subject to annual or *ad hoc* reviews depending on the needs and changing market conditions.

A dedicated team within the Risk Department is in charge of production, reporting and controls on risk metrics, namely:

- ensuring the completeness and reliability of the risk calculation by taking into account all the transactions transmitted by the transaction processing department;
- producing daily certification and risk indicator analysis reports;
- controlling compliance with defined limits, at the frequency of metrics calculation, most often on a daily basis.

In addition, a specific monitoring and approval process is implemented for the most sensitive counterparties or the most complex categories of financial instruments.

Governance

While not a substitute for CORISQ or for the Risk Committee of the Board of Directors (see the section 3.4 "Risk management organisation"), the Counterparty Credit Risk Committee (CCRC) closely monitors counterparty credit risk and identifies emerging risk areas through specific analysis (focus). This Committee, chaired by the Risk Department, brings together representatives from the Market Activities and the Global Banking and Advisory Business Units, but also departments that, within the risk management function, are in charge of monitoring counterparty credit risks on market transactions and credit risk. The CCRC also provides an opinion on the changes to the frameworks within its competence.

Replacement risk

The Group frames the replacement risks by limits:

- defined at the counterparty level;
- consolidated across all products types authorised with the counterparty;
- established by maturity buckets to control future exposure using the Potential Future Exposure (PFE) measure also known as CVaR within the Group;
- calibrated according to the credit quality and the nature of the counterparty, the nature/maturity of the financial instruments contemplated (FX transactions, repos transactions, security lending transactions, derivatives, etc.), and the economic understanding, the contractual legal framework agreed and any other risk mitigants.

The Group also considers other measures to further control the replacement cost risk: it has developed a set of stress test scenarios that are used to calculate the exposure that would result from changes in the fair value of transactions concluded with all its counterparties in the event of extreme shocks affecting the market parameters (see wrong way risk section).

CVA (Credit Valuation Adjustment)

In addition to the replacement risk, the CVA (Credit Valuation Adjustment) measures the adjustment of the value of the Group's derivatives and repos portfolio in order to take into account the credit quality of the Group's counterparties (see dedicated section).

Positions taken to hedge the volatility of the CVA (credit, interest rate or equity instruments) are monitored through:

- sensitivity limits;
- stress test limits: scenarios representative of the market risks impacting the CVA (credit spreads, interest rates and exchange rates) are applied to carry out the stress test on CVA.

The different indicators and the Stress-Tests are monitored on the net amount (the sum of the CVA exposure and of the hedges traded by the desk).

Calibrations and monitoring of these limits follow the same rules as the one described in the market risk section.

Risk on central counterparties

The counterparty credit risk stemming from the clearing of derivatives and repos with central counterparties (CCP) is framed by specific limits on initial margins, both for house and client activities (client clearing), and on the Group's contributions to the CCP default funds (guarantee deposits).

In addition, a stress test limit is also defined to capture the impact of a scenario where a major CCP member should default.

It should be noted that the EMIR (European Market Infrastructure Regulation) Regulations in Europe and the DFA (Dodd-Frank Act) in the United States, require that the most standardised over-the-counter transactions be compensated *via* clearing houses approved by the authorities and subject to prudential regulation.

See table "EAD and RWA towards central counterparties" of section 7.4 "Quantitative Information" for more information.

7.2 MITIGATION OF COUNTERPARTY CREDIT RISK ON MARKET OPERATIONS

The Group uses various techniques to reduce this risk:

- the signing, in the most extensive way possible, of close-out netting agreements for over-the-counter (OTC) transactions;
- the collateralisation of market operations, either through clearing houses for eligible products (listed products and certain OTC products), or through a bilateral margin call exchange mechanism which covers both current exposure (variation margins) but also future exposure (initial margins).

Close-out netting agreements

Societe Generale's standard policy is to conclude master agreements including provisions for close-out netting.

These provisions allow on the one hand the immediate termination (close-out) of all transactions governed by these agreements when one of the parties defaults, and on the other hand the settlement of a net amount corresponding to the total value of the portfolio, after netting of mutual debts and claims. This balance may be the subject of a guarantee or collateralisation.

In order to reduce any legal risk associated with documentation and to comply with key international standards, the Group prefers to document these agreements under the main international standards as published by national or international professional associations such as International Swaps and Derivatives Association (ISDA), International Capital Market Association (ICMA), International Securities Lending Association (ISLA), French Banking Federation (FBF), etc.

These contracts establish a set of contractual terms generally recognised as standard and give way to the modification or addition of more specific provisions between the parties in the final contract. This standardisation reduces implementation times and secures operations. Provisions detailing counterparty credit risk mitigation techniques are reviewed and analysed by the Bank's legal services to ensure their applicability.

Collateralisation

Most of over-the-counter transactions are collateralised. There are two types of collateral exchanges:

- initial margin (IM): an initial amount of collateral aiming at covering potential future exposure, *i.e.* the unfavourable change in the Mark-to-Market of positions in the time period between the last collection of margins and the liquidation of positions following the counterparty default. This initial deposit is kept by a third party[1] to ensure its immediate availability, even in the event of a default of the counterparty;
- variation margin (VM): collateral collected to cover current exposure arising from Mark-to-Market changes, used as an approximation of the actual loss resulting from the default of one of the counterparties.

The Group ensures a monitoring of collateral received and given both for the part covering the market value of the contracts (VM) and the risk of an unfavourable change in the Mark-to-Market of positions in the event of default of the counterparty (IM). The collaterals given and received, are subject to a 'haircut', which are negotiated at the time of signing of the collateral agreement. A haircut is the valuation percentage applicable to each type of collateral and is largely based on liquidity and price volatility of the underlying during both normal and stressed market conditions.

Main types of collateral are cash or high-quality and liquid assets such as for example prime or high-grade sovereign bonds.

BILATERAL COLLATERAL EXCHANGE

The initial margin, historically very rare except with hedge funds, was generalised by EMIR and DFA Regulations. It is now mandatory for the Group to exchange IM and VM for non-cleared OTC derivatives transactions with a large number of its counterparties (its financial counterparties and some non-financial counterparties above certain thresholds).

CLEARING HOUSES

EMIR and DFA Regulations have also required that the most standard over-the-counter derivatives transactions be compensated through clearing houses. The Group thus compensates its own operations (principal activity), but also operates a client clearing activity (agency-type activity), which is subject to systematic margin calls to mitigate counterparty credit risk (customers posting daily variation margins and initial margins to Societe Generale, in order to cover current exposure and future exposure.

See table "Breakdown of collateral for counterparty credit risk exposures" section 7.4 "Quantitative Information" for more information.

(1) *Except for repos and clearing activites.*

7.3 COUNTERPARTY CREDIT RISK MEASURES

7.3.1 RPLACEMENT RISK

The measure of replacement risk is based on an internal model that determines the Group's exposure profiles.

PRINCIPLES OF THE MODEL

The future fair value of market transactions with each counterparty is estimated from Monte Carlo models based on a historical analysis of market risk factors.

The principle of the model is to represent the possible future financial market conditions by simulating the evolutions of the main risk factors to which the institution's portfolio is sensitive. For these simulations, the model uses different diffusion models to account for the characteristics inherent in the risk factors considered and uses a 10-year history for calibration.

The transactions with the various counterparties are then revalued according to these different scenarios at the different future dates until the maturity of the transactions, taking into account the terms and conditions defined in the contractual legal framework agreed, notably in terms of netting and collateralisation.

The distribution of the counterparty exposures thus obtained allows the calculation of regulatory capital for counterparty credit risk and the economic monitoring of positions.

The Risk Department responsible for Model Risk Management at Group level, assesses the theoretical robustness (review of the design and development quality), the compliance of the implementation and the suitability of the use of the model. This independent review process ends with (i) a report that describes the scope of the review, the tests carried out, the results of the review, the conclusions or recommendations and (ii) review and approval Committees. This process results in reporting to the appropriate bodies.

REGULATORY INDICATOR

With respect to the calculation of capital requirements for counterparty credit risk, the ECB, following the Targeted Review of Internal Models, has renewed the approval for using the internal model described above to determine the Effective Expected Positive Exposure (EEPE) indicator.

For products not covered by the internal model as well as for entities in the Societe Generale Group that have not been authorised by the supervisor to use the internal model, the Group uses the market-price valuation method for derivatives[1] and the general financial security-based method for securities financing transactions (SFT).

The effects of compensation agreements and collateralisation are taken into account either by their simulation in the internal model, or by applying the rules as defined in the market-price valuation method or the financial security-based method, and by subtracting the value of the collateral.

These exposures are then weighted by rates resulting from the credit quality of the counterparty to compute the Risk-Weighted Assets (RWA). These rates can be determined by the standardised approach or the advanced approach (AIRB).

The RWA breakdown for each approach is available in the "Analysis of Counterparty Credit Risk Exposure by Approach" table in Section 7.4 "Quantitative Information".

ECONOMIC INDICATOR

For the economic monitoring of positions, Societe Generale relies mainly on a maximum exposure indicator determined from the Monte Carlo simulation, called Credit Value-at-Risk (CVaR) internally or PFE (Potential Future Exposure). This is the maximum amount of loss that could occur after eliminating 1% of the most adverse occurrences. This indicator is calculated at different future dates, which are then aggregated into segments, each of them being framed by limits.

The Group has also developed a set of stress test scenarios to determine the exposure that would result from changes in the fair value of transactions with all its counterparties in the event of an extreme shock affecting the market parameters.

7.3.2 CREDIT VALUATION ADJUSTMENT

MAIN PRINCIPLES

The CVA (Credit Valuation Adjustment) refers to adjustment to Marked-to-market of derivatives and repos portfolio to take into account counterparty credit risk of each counterparty facing the Group in the valuation. This adjustment is equivalent to the counterparty credit risk hedging cost in the Credit Default Swap (CDS) market.

For a specific counterparty, the CVA is determined on the basis of:

- the positive expected exposure to the counterparty, which is the average of the positive hypothetical future exposure values for a transaction or a group of transactions. It is mainly determined using risk neutral Monte Carlo simulations of risk factors that may affect the valuation of the derivatives transactions. The transactions are revalued through time according to the different scenarios, taking into account the terms and conditions defined in the contractual legal framework agreed, notably in terms of netting and collateralisation (*i.e* that transactions with appropriate credit mitigants will generate lower expected exposure compared to transactions without credit mitigants);
- the probability of default of the counterparty, which is linked to the level of CDS spreads;
- the amount of losses in the event of default (LGD – Loss Given Default taking into account the recovery rate).

The Group computes this adjustment for all counterparties which are not subject to a daily margin call or for which collateral only partially covers the exposure.

(1) In this method, the EAD (Exposure At Default) relating to the Bank's counterparty credit risk is by aggregating the positive market values of all transactions (replacement cost) supplemented by an add-on factor.

CAPITAL REQUIREMENT FOR CVA RISK

The financial institutions are subject to the calculation of a capital requirement under the CVA, to cover its variation over ten days. The scope of counterparties is reduced to financial counterparties as defined in EMIR (European Market Infrastructure Regulation) or to certain Corporates that may use derivatives beyond certain thresholds and for purposes other than hedging.

The CVA charge is computed by the Group using mainly the advanced method:

- the positive expected exposure to the counterparty is mainly determined using the internal model described in section 7.3.1, which allows to estimate the future exposure profiles to a counterparty, taking into account counterparty credit risk mitigants;
- the capital charge is the sum of two elements: VaR on CVA and Stressed VaR on CVA. The method chosen is similar to the one developed for the calculation of the market VaR (see Chapter 9 *Market Risk*), and consists of an historical simulation of the change in the CVA due to fluctuations in the credit spreads observed on the counterparties, with a confidence interval of 99%. The calculation is made on the credit spreads variation observed, on the one hand, over a one-year rolling period (VaR on CVA), and, on the other hand, over a fixed one-year historical window corresponding to the period of greatest tension in terms of credit spreads (stressed VaR on CVA). The associated capital charge is equal to the sum of the two multiplied by a coefficient set by the regulator, specific to each bank.

The positions not taken into account in the advanced method are subject to a capital charge determined through the standard method by applying a normative weighting factor to the product of the EAD (Exposure At Default) by a maturity calculated according to the rules defined by the CRR (Capital Requirement Regulation).

Refer to the “Credit Valuation Adjustment (CVA)” capital requirements table in Section 7.4 for the decomposition of CVA-related RWA between advanced and standard methods.

CVA RISK MANAGEMENT

The management of this exposure and of this regulatory capital charge led the Bank to purchase hedging instruments such as Credit Default Swap (CDS) from large credit institutions on certain identified counterparties or on indices composed of identifiable counterparties. In addition to reducing credit risk, it decreases the variability of the CVA and the associated capital amounts resulting from fluctuations in counterparty credit spreads.

7.3.3 UNFAVOURABLE CORRELATION RISK (WRONG WAY RISK)

Wrong-way risk is the risk of the Group’s exposure to a counterparty increasing significantly, combined with a simultaneous increase in the probability of the counterparty defaulting.

There are two different cases:

- general wrong-way risk, where there is a correlation between certain market conditions and the creditworthiness of the counterparty;
- specific wrong-way risk, where the amount of exposure is directly related to the credit quality of the counterparty.

The specific wrong-way risk is subject to dedicated regulatory capital requirements, through an add-on applied when calculating the capital requirements. The EEPE indicator for transactions identified as facing a specific wrong-way risk is reassessed based on the assumption of a default from the counterparty. This process leads to stricter capital requirements regarding counterparty credit risks on such transactions. The PFE (Potential Future Exposure) calculated in these specific risk situations is also increased, thereby limiting the exposure on such transactions, as there is no change in the risk limit framework.

The general wrong way risk is controlled *via* a set of stress tests (single or multifactor stress tests) applied to transactions made with a given counterparty, based on scenarios common with the market stress tests. This set-up is based on:

- a quarterly analysis of stress tests on all counterparties (financial institutions, corporates, sovereigns, hedge funds and proprietary trading groups) allowing to understand the most adverse scenarios related to a joint deterioration in the quality of counterparties and the associated positions;
- a multi-factor stress test monitoring on all counterparties, which allows to holistically quantify the potential loss on market activities following market movements which could trigger a wave of defaults on these counterparties;
- a weekly monitoring of dedicated single-factor stress tests for hedge fund counterparties and Proprietary Trading Groups, subject to limits at the counterparty level. This framework is supplemented by an adverse stress test that quantifies the potential loss on the principal and third-party activities (client clearing) in the event of market movements violent enough to trigger a wave of defaults on this type of counterparty.

7.4 QUANTITATIVE INFORMATION

TABLE 66: COUNTERPARTY CREDIT RISK, EAD AND RWA BY APPROACH AND EXPOSURE CLASS

Counterparty credit risk is broken down as follows:

	31.12.2020								
(In EURm)	IRB			Standard			Total		
Exposure class	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**
Sovereign	23,472	23,560	382	170	170	-	23,642	23,730	382
Institutions	19,536	19,673	3,387	23,628	23,928	1,403	43,164	43,601	4,789
Corporates	54,370	54,145	15,786	1,697	1,398	1,246	56,067	55,543	17,032
Retail	121	121	8	2	2	2	122	122	10
Other	1	1	-	3,499	3,499	986	3,500	3,500	987
TOTAL	**97,500**	**97,500**	**19,563**	**28,996**	**28,996**	**3,636**	**126,496**	**126,496**	**23,199**

The table as at 31 December 2019 has been modified as follows in order to include risk exposures related to contributions to the default funds of central counterparties (EUR 1.1 billion of RWA as at 31 December 2019):

	31.12.2019								
(In EURm)	IRB			Standard			Total		
Exposure class	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**	**Exposure**	**EAD**	**RWA**
Sovereign	22,843	22,954	302	3	3	-	22,845	22,956	302
Institutions	20,006	20,005	2,901	29,209	29,209	1,035	49,215	49,215	3,936
Corporates	44,030	43,919	10,639	1,042	1,042	826	45,072	44,961	11,465
Retail	189	189	9	1	1	1	190	190	11
Other	9	9	-	3,960	3,960	1,267	3,970	3,970	1,267
TOTAL	**87,077**	**87,077**	**13,852**	**34,215**	**34,215**	**3,129**	**121,292**	**121,292**	**16,981**

The tables above feature amounts excluding the CVA (Credit Valuation Adjustment) which represents EUR 3.1 billion as at 31 December 2020 (*vs.* EUR 2.6 billion as at 31 December 2019).

TABLE 67: ANALYSIS OF COUNTERPARTY CREDIT RISK (CCR) EXPOSURE BY APPROACH (CCR1)

Subject to supervisor approval, the Internal Model Method (IMM) enables the use of an internal model to calculate the Effective Expected Positive Exposure (EEPE), multiplied by a regulatory factor called “alpha” as defined in Article 284-4 of Regulation (EU) 575/2013. For Societe Generale, it stands at 1.85. The aim of the internal model is to determine exposure profiles.

	31.12.2020						
(In EURm)	**Notional**	**Replacement cost/current market value**	**Potential future credit exposure**	**EEPE**	**Multiplier**	**EAD post CRM**	**RWAs**
Mark to market		21,626	29,694			26,586	5,677
Original exposure							
Standardised approach							
IMM (for derivatives and SFTs)				36,449	1.85	67,431	15,767
of which securities financing transactions				*15,500*	*1.85*	*28,676*	*2,270*
of which derivatives and long settlement transactions				*20,949*	*1.85*	*38,756*	*13,497*
of which from contractual cross-product netting							
Financial collateral simple method (for SFTs)							
Financial collateral comprehensive method (for SFTs)						9,937	383
VaR for SFTs							
TOTAL							**21,827**

The table as at 31 December 2019 has been modified as follows:

	31.12.2019						
(In EURm)	**Notional**	**Replacement cost/current market value**	**Potential future credit exposure**	**EEPE**	**Multiplier**	**EAD post CRM**	**RWAs**
Mark to market		6,802	31,535			26,443	4,481
Original exposure							
Standardised approach							
IMM (for derivatives and SFTs)				43,569	1.5	65,354	11,698
of which securities financing transactions				*20,159*	*1.5*	*30,239*	*1,514*
of which derivatives and long settlement transactions				*23,410*	*1.5*	*35,115*	*10,184*
of which from contractual cross - product netting							
Financial collateral simple method (for SFTs)							
Financial collateral comprehensive method (for SFTs)						3,433	418
VaR for SFTs							
TOTAL							**16,597**

TABLE 68: EAD AND RWA TOWARDS CENTRAL COUNTERPARTIES (CCR8)

	31.12.2020		31.12.2019	
(In EURm)	EAD	RWA	EAD	RWA
Exposures to QCCPs	28,248	1,228	32,252	1,454
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which:	10,038	201	16,225	326
▪ OTC derivatives	1,003	20	1,108	23
▪ Exchange-traded derivatives	7,243	145	13,793	277
▪ Securities financing transactions	1,791	36	1,323	26
▪ Netting sets where cross-product netting has been approved	-	-	-	-
Segregated initial margin	12,701	-	9,731	-
Non-segregated initial margin	2,036	41	2,525	51
Pre-funded default fund contributions	3,474	986	3,771	1,077
Alternative calculation of own funds requirements for exposures	-	-	-	-
Exposures to non-QCCPs	61	35	-	-
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which:	-	-	-	-
▪ OTC derivatives	-	-	-	-
▪ Exchange-traded derivatives	-	-	-	-
▪ Securities financing transactions	-	-	-	-
▪ Netting sets where cross-product netting has been approved	-	-	-	-
Segregated initial margin	35	35	-	-
Non-segregated initial margin	-	-	-	-
Pre-funded default fund contributions	25	-	-	-
Unfunded default fund contributions	-	-	-	-

TABLE 69: BREAKDOWN OF COLLATERAL FOR COUNTERPARTY CREDIT RISK (CCR5-B)

	31.12.2020			
	Collateral used in derivative transactions		Collateral used in SFTs	
(In EURm)	Fair value of collateral received	Fair value of posted collateral	Fair value of collateral received	Fair value of posted collateral
Cash	110,446	25,241	23,251	33,134
Banks/Broker-dealers	119	383	91,651	96,638
Central Counterparties	20	12,098	9,241	4,145
Government-sponsored entities/Government Agencies	-	-	-	-
Hedge funds	0	-	17	111
Insurance and Financial Guaranty Firms	18	-	825	3,279
Mutual funds	63	-	1,399	3,034
Nonfinancial corporations	1,088	36	22,697	72,315
Pension Plans	-	-	-	-
Sovereign national governments	16,771	3,621	258,657	292,114
SPVs, SPCs, and SPEs	-	-	-	-
Supranationals	64	-	2,228	951
Others	-	-	4	272

	31.12.2019			
	Collateral used in derivative transactions		Collateral used in SFTs	
(In EURm)	Fair value of collateral received	Fair value of posted collateral	Fair value of collateral received	Fair value of posted collateral
Cash	24,186	22,125	14,418	22,569
Banks/Broker-dealers	27	576	58,188	64,052
Central Counterparties	-	8,238	8,262	5,620
Government-sponsored entities/Government Agencies	-	-	-	-
Hedge funds	0	-	3	107
Insurance and Financial Guaranty Firms	4	10	864	2,647
Mutual funds	179	-	823	2,444
Nonfinancial corporations	464	1,437	25,488	60,671
Pension Plans	0	-	2	-
Sovereign national governments	4,391	2,393	230,186	241,977
SPVs, SPCs, and SPEs	-	-	-	186
Supranationals	-	-	1,561	1,557
Others	-	-	0	207

TABLE 70: EXPOSURES AND RWA RELATED TO CREDIT VALUATION ADJUSTMENT (CCR2)

	31.12.2020		31.12.2019	
(In EURm)	Exposure value	RWA	Exposure value	RWA
Total portfolios subject to the Advanced Method	37,471	2,783	33,457	2,276
(i) VaR component (including the 3×multiplier)		740	-	318
(ii) Stressed VaR component (including the 3×multiplier)		2,043	-	1,959
All portfolios subject to the Standardised Method	5,349	347	5,611	310
Based on Original Exposure Method	-	-	-	-
Total subject to the CVA capital charge	**42,821**	**3,131**	**39,068**	**2,586**

BREAKDOWN COUNTERPARTY CREDIT RISK – DETAIL

TABLE 71: IRB COUNTERPARTY CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD SCALE (CCR4)

The table below presents Group exposures subject to counterparty credit risk and for which an internal model is used with a view to calculating RWA. In accordance with the EBA's recommendations, CVA charges and exposures cleared through a CCP have been excluded.

	31.12.2020						
(In EURm)	PD scale	EAD post CRM	Average PD	Average LGD	Average maturity	RWA	RWA density
Central governments and central banks	0.00 to <0.15	23,262	0.02%	1.68%	1.25	120	0.51%
	0.15 to <0.25	-				-	
	0.25 to <0.50	22	0.26%	39.02%	1.00	7	32.39%
	0.50 to <0.75	12	0.50%	45.00%	3.56	10	86.91%
	0.75 to <2.50	111	2.12%	21.73%	0.98	56	49.99%
	2.50 to <10.00	153	4.50%	39.18%	1.36	189	124.01%
	10.00 to <100.00	-				-	
	100.00 (default)	-				-	
	Subtotal	**23,560**	**0.05%**	**2.07%**	**1.25**	**382**	**1.62%**
Institutions	0.00 to <0.15	16,715	0.04%	24.33%	1.58	1,762	10.54%
	0.15 to <0.25	-				-	
	0.25 to <0.50	1,475	0.26%	26.20%	1.92	505	34.23%
	0.50 to <0.75	717	0.50%	37.67%	1.47	412	57.56%
	0.75 to <2.50	375	1.52%	41.49%	1.59	358	95.35%
	2.50 to <10.00	336	3.74%	33.75%	1.13	270	80.24%
	10.00 to <100.00	48	13.49%	28.36%	2.18	71	149.52%
	100.00 (default)	2	100.00%	35.00%	4.03	8	437.50%
	Subtotal	**19,667**	**0.21%**	**25.43%**	**1.59**	**3,386**	**17.22%**
Corporate – SME	0.00 to <0.15	73	0.12%	37.63%	3.51	8	11.17%
	0.15 to <0.25	44	0.20%	12.15%	2.29	5	10.60%
	0.25 to <0.50	57	0.28%	32.16%	3.88	26	45.45%
	0.50 to <0.75	59	0.51%	36.36%	2.28	28	47.76%
	0.75 to <2.50	80	1.77%	34.91%	2.24	53	66.49%
	2.50 to <10.00	68	4.11%	37.69%	2.04	57	83.99%
	10.00 to <100.00	18	17.93%	37.03%	2.12	24	132.51%
	100.00 (default)	3	100.00%	38.92%	2.09	14	486.44%
	Subtotal	**402**	**2.74%**	**33.32%**	**2.67**	**215**	**53.59%**
Corporate – Specialised lending	0.00 to <0.15	225	0.07%	25.20%	4.06	50	22.22%
	0.15 to <0.25	-				-	
	0.25 to <0.50	124	0.26%	10.15%	3.72	18	14.14%
	0.50 to <0.75	126	0.50%	31.40%	1.87	40	31.40%
	0.75 to <2.50	497	1.65%	11.65%	1.78	119	24.02%
	2.50 to <10.00	365	3.86%	10.27%	1.51	95	25.94%
	10.00 to <100.00	12	11.42%	3.10%	2.79	1	9.77%
	100.00 (default)	32	100.00%	10.00%	3.97	21	65.28%
	Subtotal	**1,380**	**4.11%**	**15.03%**	**2.32**	**343**	**24.85%**

(In EURm)	31.12.2020						
	PD scale	**EAD post CRM**	**Average PD**	**Average LGD**	**Average maturity**	**RWA**	**RWA density**
Corporate – Other	0.00 to <0.15	36,811	0.06%	33.93%	1.32	5,171	14.05%
	0.15 to <0.25	0	0.17%	38.50%	1.00	0	23.82%
	0.25 to <0.50	3,823	0.26%	31.36%	2.33	1,518	39.69%
	0.50 to <0.75	4,020	0.50%	24.28%	2.45	1,387	34.50%
	0.75 to <2.50	4,758	1.47%	30.64%	2.99	3,531	74.22%
	2.50 to <10.00	2,169	4.65%	34.41%	1.84	2,431	112.08%
	10.00 to <100.00	367	13.98%	32.21%	2.92	546	148.84%
	100.00 (default)	261	100.00%	32.15%	2.30	492	188.18%
	Subtotal	**52,209**	**1.02%**	**32.70%**	**1.67**	**15,076**	**28.88%**
Retail – Other non – SME	0.00 to <0.15	-				-	
	0.15 to <0.25	113	0.20%	11.50%	5.00	6	4.94%
	0.25 to <0.50	6	0.34%	46.00%	5.00	2	27.90%
	0.50 to <0.75	0	0.53%	28.75%	5.00	0	22.64%
	0.75 to <2.50	-				-	
	2.50 to <10.00	-				-	
	10.00 to <100.00	1	24.71%	24.00%	5.00	0	61.40%
	100.00 (default)	-				-	
	Subtotal	**121**	**0.36%**	**13.40%**	**5.00**	**8**	**6.56%**
SECURITISATION POSITIONS	**Subtotal**	**1**				**0**	**37.86%**
TOTAL		**97,340**	**0.67%**	**23.54%**	**1.57**	**19,411**	**19.94%**

		31.12.2019					
(In EURm)	PD scale	EAD post CRM	Average PD	Average LGD	Average maturity	RWA	RWA density
Central governments and central banks	0.00 to <0.15	22,651	0.00%	2.59%	1.21	109	0.48%
	0.15 to <0.25	-				-	
	0.25 to <0.50	18	0.26%	39.33%	1.31	6	35.91%
	0.50 to <0.75	30	0.50%	45.00%	3.95	27	91.72%
	0.75 to <2.50	201	1.10%	20.24%	0.89	73	36.35%
	2.50 to <10.00	55	4.61%	45.00%	1.21	87	157.63%
	10.00 to <100.00	-				-	
	100.00 (default)	-				-	
	Subtotal	**22,954**	**0.03%**	**2.91%**	**1.21**	**302**	**1.32%**
Institutions	0.00 to <0.15	17,019	0.04%	24.20%	1.53	1,517	8.91%
	0.15 to <0.25	-				-	
	0.25 to <0.50	1,203	0.26%	27.90%	1.66	375	31.17%
	0.50 to <0.75	455	0.50%	38.81%	1.78	293	64.28%
	0.75 to <2.50	615	1.75%	40.21%	1.56	450	73.20%
	2.50 to <10.00	163	4.06%	30.80%	1.36	168	102.86%
	10.00 to <100.00	38	12.80%	23.81%	1.06	71	185.34%
	100.00 (default)	4	100.00%	35.00%	2.88	19	437.50%
	Subtotal	**19,498**	**0.20%**	**25.86%**	**1.55**	**2,893**	**14.84%**
Corporate – SME	0.00 to <0.15	55	0.10%	30.79%	3.58	10	18.12%
	0.15 to <0.25	79	0.20%	11.72%	4.98	14	18.22%
	0.25 to <0.50	11	0.26%	30.28%	1.74	3	23.98%
	0.50 to <0.75	34	0.51%	34.16%	2.63	16	47.61%
	0.75 to <2.50	53	1.47%	34.82%	2.40	36	67.80%
	2.50 to <10.00	116	6.29%	31.12%	3.67	113	97.16%
	10.00 to <100.00	8	19.18%	35.09%	2.03	12	145.12%
	100.00 (default)	2	100.00%	38.47%	1.68	5	250.30%
	Subtotal	**358**	**3.30%**	**27.74%**	**3.55**	**208**	**58.13%**
Corporate – Specialised lending	0.00 to <0.15	203	0.07%	30.00%	3.75	57	28.15%
	0.15 to <0.25	-				-	
	0.25 to <0.50	27	0.26%	10.24%	4.13	4	16.06%
	0.50 to <0.75	50	0.50%	10.00%	4.22	11	21.13%
	0.75 to <2.50	483	1.86%	9.25%	2.37	113	23.37%
	2.50 to <10.00	451	3.90%	9.87%	1.71	135	29.85%
	10.00 to <100.00	-				-	
	100.00 (default)	-				-	
	Subtotal	**1,214**	**2.23%**	**13.00%**	**2.47**	**319**	**26.32%**
Corporate – Other	0.00 to <0.15	30,744	0.05%	33.36%	1.36	3,634	11.82%
	0.15 to <0.25	-				-	
	0.25 to <0.50	3,574	0.26%	29.54%	2.48	1,141	31.94%
	0.50 to <0.75	3,106	0.50%	25.64%	2.33	1,180	37.98%
	0.75 to <2.50	2,775	1.48%	28.50%	2.42	1,890	68.11%
	2.50 to <10.00	1,948	4.31%	31.89%	1.60	1,910	98.06%
	10.00 to <100.00	91	13.86%	32.68%	1.68	143	156.49%
	100.00 (default)	107	100.00%	29.43%	3.20	211	196.79%
	Subtotal	**42,345**	**0.67%**	**31.93%**	**1.61**	**10,110**	**23.87%**
Retail – Other non – SME	0.00 to <0.15	11	0.03%	12.30%	5.00	0	1.29%
	0.15 to <0.25	177	0.20%	11.50%	5.00	9	4.94%
	0.25 to <0.50	1	0.34%	46.00%	5.00	0	27.90%
	0.50 to <0.75	0	0.53%	28.75%	5.00	0	22.64%
	0.75 to <2.50	-				-	
	2.50 to <10.00	-				-	
	10.00 to <100.00	-				-	
	100.00 (default)	-				-	
	Subtotal	**189**	**0.19%**	**11.79%**	**5.00**	**9**	**4.90%**
SECURITISATION POSITIONS	**Subtotal**	**9**				**0**	**0.00%**
TOTAL		**86,567**	**0.43%**	**21.15%**	**1.52**	**13,841**	**15.99%**

TABLE 72: COUNTERPARTY CREDIT RISK IN STANDARDISED APPROACH – EAD DISTRIBUTED BY RISK WEIGHT (CCR3)

In accordance with the EBA's guidelines for revised Pillar 3 (EBA/GL/2016/11), amounts are presented without securitisation.

	31.12.2020															
(In EURm)	Risk weight															
Exposure Classes	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1 250%**	**Others RW**	**Total**
Central governments or central banks	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170
Regional governments or local authorities	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Public sector entities	-	-	-	-	2	-	-	-	-	1	-	-	-	-	-	3
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	8,435	12,033	0	-	2,687	-	278	-	-	483	1	-	-	-	9	23,925
Corporates	-	-	-	-	0	-	22	-	-	1,193	0	-	-	-	183	1,398
Retail	-	-	-	-	-	-	-	-	1	1	-	-	-	-	0	2
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-	-	-	-	-	0	-	-	-	0	0
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	0
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**8,605**	**12,033**	**0**	**-**	**2,688**	**-**	**300**	**-**	**1**	**1,678**	**1**	**-**	**-**	**-**	**192**	**25,497**

(In EURm)	31.12.2019															
	Risk weight															
Exposure Classes	**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1 250%**	**Autres RW**	**Total**
Central governments or central banks	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	5
Multilateral Development Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	8,020	18,501	38	-	2,439	-	16	-	-	159	-	-	-	-	31	29,204
Corporates	-	-	-	-	104	-	9	-	-	782	-	-	-	-	147	1,042
Retail	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collective investments undertakings (CIU)	-	-	-	-	-	-	-	-	-	189	-	-	-	-	-	189
Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**8,023**	**18,501**	**38**	**-**	**2,543**	**-**	**25**	**-**	**-**	**1,136**	**-**	**-**	**-**	**-**	**178**	**30,444**

TABLE 73: CREDIT DERIVATIVES EXPOSURES (CCR6)

	31.12.2020		
	Credit derivative hedges		Other credit derivatives
(In EURm)	Protection bought	Protection sold	
Notionals	**-**	**-**	**-**
Single-name credit default swaps	-	-	116,102
Index credit default swaps	-	-	57,246
Total return swaps	-	-	872
Credit options	-	-	3,227
Other credit derivatives	2,486	-	14,632
TOTAL NOTIONALS	**2,486**	**-**	**192,081**
FAIR VALUES	-	-	-
Positive fair value (asset)	*10*	-	*3,213*
Negative fair value (liability)	*(2)*	-	*(2,879)*

	31.12.2019		
	Credit derivative hedges		Other credit derivatives
(In EURm)	Protection bought	Protection sold	
Notionals			
Single-name credit default swaps	-	-	147,689
Index credit default swaps	-	-	74,288
Total return swaps	-	-	802
Credit options	-	-	1,223
Other credit derivatives	2,466	-	17,030
TOTAL NOTIONALS	**2,466**	**-**	**241,033**
FAIR VALUES	-	-	-
Positive fair value (asset)	*1*	-	*5,027*
Negative fair value (liability)	*(17)*	-	*(3,908)*

TABLE 74: CREDIT DERIVATIVES EXPOSURES - PROTECTIONS BOUGHT

This table presents the notional value of credit derivative hedges by exposure class.

(In EURm)	31.12.2020	31.12.2019
Sovereign	-	-
Institutions	2,486	2,466
Corporates	-	-
Retail	-	-
Others	-	-
TOTAL	**2,486**	**2,466**

TABLE 75: IMPACT OF NETTING AND COLLATERAL HELD ON EXPOSURE VALUES (CCR5-A)

	31.12.2020				
(In EURm)	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposire
Derivatives	303,530	270,556	65,442	30,685	34,757
SFTs	1,167,508	504,084	663,424	572,633	90,791
Cross-product netting	-	-	-	-	-
TOTAL	**1,471,038**	**774,639**	**728,866**	**603,318**	**125,549**

The concept of net credit exposure presented in this table differs from that of EAD, insofar as other parameters not included here may be involved in the calculation of regulatory exposure (regulatory haircuts, add-ons...).

TABLE 76: RWA AND CAPITAL REQUIREMENTS FLOW STATEMENTS OF COUNTERPARTY CREDIT RISK EXPOSURES UNDER IRB APPROACH (CCR7)

IMM is the internal model method applied to calculate exposures to counterparty credit risk. The banking models used are subject to approval of the supervisor.

Application of these internal models has an impact on the method used to calculate the EAD of market transactions but also on the Basel maturity calculation method.

(In EURm)	RWA amounts – IRB IMM	RWA amounts – IRB hors IMM	RWA amounts – Total IRB	Capital requirements – IRB IMM	Capital requirements – IRB hors IMM	Capital requirements – Total IRB
RWA as at end of previous reporting period (30.09.2020)	**13,103**	**3,978**	**17,081**	**1,048**	**318**	**1,366**
Asset size	308	(272)	37	25	(22)	3
Credit quality of counterparties	358	110	468	29	9	37
Model updates			-	-	-	-
Methodology and policy	2,623		2,623	210	-	210
Acquisitions and disposals			-	-	-	-
Foreign exchange movements	(184)	(62)	(246)	(15)	(5)	(20)
Other	(461)	62	(399)	(37)	5	(32)
RWA as at end of reporting period (31.12.2020)	**15,746**	**3,817**	**19,563**	**1,260**	**305**	**1,565**

The table above displays data without CVA (Credit Valuation Adjustment) which amounts to EUR 2.8 billion in advanced approach.

8

SECURITISATION

IN BRIEF

This section provides information on Societe Generale's securitisation positions, which have already been incorporated into the relevant sections (credit risk and market risk).

They are subject to specific capital requirements according to European regulations.

Regulatory capital requirements for securitisations in the Banking Book at end 2020

EUR 439m

(Amount at end 2019: EUR 301m)

Regulatory capital requirements for securitisations in the Trading Book at end 2020

EUR 43m

(Amount at end 2019: EUR 22m)

8.1 SECURITISATIONS AND REGULATORY FRAMEWORK

This section presents information on Societe Generale's securitisation activities, acquired or carried out for proprietary purposes or for its customers. It describes the risks associated with these activities and the management of those risks. Finally, it contains quantitative information to describe these activities during 2020, as well as the capital requirements for the Group's regulatory banking book and trading book within the scope defined by prudential regulations.

As defined in prudential regulations, the term securitisation refers to a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is divided into tranches, having the following characteristics:

- the transaction achieves significant risk transfer, in case of origination;
- payments in the transaction or scheme are contingent on the performance of the exposure or pool of exposures;
- subordination of some tranches determines the distribution of losses during the ongoing life of the transaction or risk transfer scheme.

The securitisation transactions are subject to the regulatory treatment defined:

- in Regulation (EU) No 2017/2401 amending Regulation (EU) No 575/2013 relating to the capital requirements applicable to credit institutions and to credit and investment firms;
- in Regulation (EU) No 2017/2402 creating a general framework for securitisation as well as a specific framework for simple, transparent and standardised securitisations (STS).

Regulation No 2017/2401 presents the hierarchy of methods for weighting securitisation positions (see section 8.6). The floor weighting rate is 7% (10% for STS securitisations).

Regulation No 2017/2402 defines the criteria for the identification of "simple, transparent and standardised" (STS) securitisations to which specific and lower capital charges are applicable. The text also specifies the authorisation procedure for third-party organisations that will be involved in ensuring compliance with requirements relating to STS securitisations. The risk retention requirement for the transferor is set at a minimum level of 5%.

Guidelines or Regulatory Technical Standards issued by the technical authorities, ESMA and the EBA, clarify some aspects of the level 1 European regulations.

8.2 ACCOUNTING METHODS

The securitisation transactions that Societe Generale invests in (i.e. the Group invests directly in certain securitisation positions, is a liquidity provider or a counterparty of derivative exposures) are recognised in accordance with Group accounting principles, as set forth in the notes to the consolidated financial statements included in the 2021 Universal Registration Document.

In the financial statements, the classification of securitisation positions depends on their contractual characteristics and the way the entity manages those financial instruments.

When analysing the contractual cash flow of financial assets issued by a securitisation vehicle, the entity must analyse the contractual terms, as well as the credit risk of each tranche and the exposure to credit risk in the underlying pool of financial instruments. To that end, the entity must apply a "look-through approach" to identify the underlying instruments that are creating the cash flows.

Contractual flows that represent solely payments of principal and interest on the principal amount outstanding are consistent with a basic lending arrangement (SPPI flows: Solely Payments of Principal and Interest).

In the financial statements, the basic securitisation positions (SPPI) are classified into two categories, depending on the business model used to managed them:

- when they are managed under a "Collect and Sell" business model, the positions are classified as "Financial assets at fair value through other comprehensive income". Accrued or earned income on these positions is recorded in profit or loss based on the effective interest rate, under Interest and similar income. At the reporting date, these instruments are measured at fair value, and changes in fair value, excluding income, are recorded under Unrealised or deferred gains and losses. Furthermore, as these financial assets are subject to impairment for credit risk, changes in expected credit losses are recorded in profit or losses under Cost of risk with a corresponding entry to Unrealised or deferred gains and losses;
- when they are managed under a "Hold to Collect" business model, the positions are measured at amortised cost. Subsequent to initial recognition, these positions are measured at amortised cost using the effective interest method, and their accrued or earned income is recorded in the income statement under Interest and similar income. Furthermore, as these financial assets are subject to impairment for credit risk, changes in expected credit losses are recorded in profit or loss under Cost of risk with a corresponding impairment of amortised cost under balance sheet assets.

The securitisation positions that are not basic (non–SPPI) will be measured at fair value through profit or loss, regardless of the business model for managing them.

At the balance sheet date, these assets are recorded in the balance sheet under Financial assets at fair value through profit or loss and changes in the fair value of these instruments (excluding interest income) are recorded in the income statement under Net gains or losses on financial instruments at fair value through profit or loss.

Interest income and expense are recorded in the income statement under Interest and similar income and Interest and similar expense.

Securitisation positions classified among the financial assets at amortised cost or among the financial assets at fair value through other comprehensive income, are systematically subject to impairment or a loss allowance for expected credit losses. These impairments and loss allowances are booked on initial recognition of the assets, without waiting for objective evidence of impairment to occur.

To determine the amount of impairment to be recorded at each reporting date, these assets are classified into one of three categories based on the increase in credit risk observed since initial recognition. Stage 1 exposures are impaired for the amount of credit losses that the Group expects to incur within 12 months; Stages 2 and 3 exposures are impaired for the amount of credit losses that the Group expects to incur over the life of the exposures.

For securitisation positions measured at fair value through profit or loss, their fair value includes already the expected credit loss, as assessed by the market participant, on the residual lifetime of the instrument.

Reclassification of securitisation positions is only required in the exceptional event that the Group changes the business model used to manage these assets.

Synthetic securitisations in the form of Credit Default Swaps follow accounting recognition rules specific to trading derivatives.

The securitisation transactions are derecognised when the contractual rights to the cash flows on the asset expire or when the Group has transferred the contractual rights to receive the cash flows and substantially all of the risks and rewards linked to the ownership of the asset. Where the Group has transferred the cash flows of a financial asset but has neither transferred nor retained substantially all the risks and rewards of its ownership and has effectively not retained control of the financial asset, the Group derecognises it and, where necessary, recognises a separate asset or liability to cover any rights and obligations created or retained as a result of transferring the asset. If the Group has retained control of the asset, it continues to recognise it in the balance sheet to the extent of its continuing involvement in that asset.

When a financial asset is derecognised in its entirety, a gain or loss on disposal is recorded in the income statement for an amount equal to the difference between the carrying value of the asset and the payment received for it, adjusted where necessary for any unrealised profit or loss previously recognised directly in equity.

8.3 STRUCTURED ENTITIES' SPECIFIC CASE

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity.

When assessing the existence of a control over a structured entity, all facts and circumstances shall be considered, among which:

- the purpose and design of the entity;
- the structuring of the entity (especially, the power to direct the relevant activities of the entity);
- risks to which the entity is exposed by way of its design and the Group's exposure to some or all of these risks;
- potential returns and benefits for the Group.

Unconsolidated structured entities are those that are not exclusively controlled by the Group.

Within the framework of the consolidation of structured entities that are controlled by the Group, the shares of those entities that are not held by the Group are recognised under "Debt" in the balance sheet.

When customer loans are securitised and partially sold to external investors, the entities carrying the loans are consolidated if the Group retains control and remains exposed to the majority of the risks and benefits associated with these loans.

8.4 MANAGEMENT OF SECURITISATION RISKS

The management of risks associated with securitisation operations follows the rules established by the Group depending on whether these assets are recorded in the banking book (credit and counterparty credit risks) or in the trading book (market risk and counterparty credit risk).

The securitisation risk is monitored by the Client Relations and Financing and Advisory Solutions department (Global Banking & Advisory - GLBA) in LoD1 and supervised in the credit risk management system by the "Corporate and Investment Banking" division (CIB) of the Risks department in LoD2.

ROLE OF GLOBAL BANKING AND ADVISORY (GLBA)

As a rule, only the Asset-Backed Products division of GLBA has the mandate to deal with transactions generating securitisation risk.

These operations consist of:

- structuring and/or primary distribution of ABS (Asset-Backed Securities), which can take the form of RMBS (Residential Mortgage-Backed Securities), CMBS (Commercial Mortgage-Backed Securities) and CLOs (Collateralised Loan Obligations) , structured or co-arranged by Societe Generale, for the benefit of issuers (companies and specialised financial companies) also called "public securitisation". These transactions do not generate any securitisation risk for the Group if no exposure is retained by Societe Generale;
- financing of customer needs, *via* commercial paper backed by assets issued by Societe Generale conduits or, marginally, on the balance sheet, also called "private securitisation". These activities generate credit risk for Societe Generale and are overseen by the "Corporate and Investment Banking" (CIB) division of the Risk Department;
- securitised products are also used as underlying on the secondary market in collateralised financing and trading transactions. These transactions generate both credit risk and market risk for the Group and are overseen by the "Corporate and Investment Banking" and "Risks on Market Activities and ALM" divisions;
- operations can also be carried out on own account by the Finance Department, as part of its mission to manage the Group's scarce resources. GLBA can then act as advice on structuring and or placement under mandate of the Finance Department.

ROLE OF THE RISK DEPARTMENT

The Risk Department, within the framework of various CORISQs chaired by General Management and in compliance with the risk appetite of Societe Generale group, formalises, jointly with the "Global Banking and Advisory" department, the Group's risk appetite with regard to securitisation activities.

These frameworks are established by type of product (primary securitisation, sale of securitisation products in secondary, collateralised financing, etc.) and aim to define the acceptable level of risk with regard to the Group's strategic objectives via limits and guidelines for granting credit.

The role and responsibilities of the Risk Department are divided according to the main risk (credit or market).

The Risk Department contributes to the definition of risk policies, taking into account the objectives of the business lines and the corresponding risk issues.

The Risk Department defines or validates the methods and procedures for analysing, measuring, approving and monitoring risks and, ultimately, ensures that they are in line with the needs of the businesses.

The Risk Department validates the operations and certain limits, the others being presented in CORISQ.

In the same way as for all structured finance transactions, the Business Unit has no delegation of signature for securitisation transactions. Any securitisation transaction must be validated by the Risk Department.

CREDIT RISK

Securitisation exposures subject to credit risk are approved through the Group's standard credit approval process. New operations are presented by the business lines (LoD1) to the Risk Department, after approval by the business line manager. The Risk Department gives its opinion on these new transactions, which are approved according to the delegations in force. All exhibitions are subject to an annual review by the business line and the Risk Department.

The rating of the transaction and the borrower as well as the LGD are therefore subject to an initial validation and an annual review for each transaction. In particular, the data used within the framework of the IAA (Internal Assessment Approach) securitisation model and the result of the calculations of this model are subject to specific validation. Regular monitoring is carried out independently of the business line and portfolio reviews are produced quarterly specifically on the bank's securitisation exposures. This monitoring makes it possible to identify any changes in the behaviour of securitised assets.

Portfolio-level limits are granted by the Risk Committee for securitisation exposures. Stress tests are also carried out on these portfolios.

The analysis of the credit risk of securitisation transactions covers the standard elements of credit risk: the performance of the underlying assets as well as that of the assignor/collector. Risk factors are reduced by structural elements of each transaction including default triggers, excess spread, delinquencies, segregated accounts and back-up collector. The monitoring of the credit risk on these transactions, of the performance of the underlying assets and of the covenants, is reviewed at portfolio level by the “Corporate and Investment Banking” division of the Risks department. each quarter during the Quarterly Portfolio Review prepared by the “Global Business Service Unit” with a focus on major events and sent to the “Corporate and Investment Banking” division of the Risk Department with a presentation in session every other quarter. A follow-up at the level of each transaction is carried out in detail each year during the Annual Review with a revalidation of the rating of the transaction.

Resecuritisation exposures go through the same approval and monitoring process.

MARKET RISK

Securitisation exposures subject to market risk are monitored and controlled through Societe Generale's market risk standard market approval process, with additional controls specific to securitisation.

The analysis of the market risk of securitisation transactions covers the standard elements of market risk: credit, spread, liquidity risk, interest rate risk (hedged with standard liquid interest rate instruments (US Treasuries , Eurodollar futures, interest rate swaps)).

Securitisation exposures are subject to strict supervision through the setting of limits on specific assets in the securitisation field (CMBS, CLO, RMBS, ABS), according to several types of indicators:

- Value at risk (VaR) and Stressed value at risk (SVaR): synthetic indicators, allowing day-to-day monitoring of market risk;
- stress test measurements, based on ten-year risk type indicators. These metrics make it possible to limit the Group's exposure to systemic risks and cases of exceptional market shocks impacting securitisation activities;
- “sensitivity” and “nominal” indicators, which allow the size of positions to be controlled;
- other specific indicators: nominal limits on the sizes of ABS market-making inventories, cash at risk and stress test limits on financing activities collateralised by ABS, which makes it possible in particular to monitor the behaviour of the underlying assets under stress and supervise the Group's exposure in the event of market shocks.

The Risk Department on Market Operations is in charge of examining limit requests made by the front office. These limits make it possible to ensure that the Group respects the appetite for the market validated by the Board of Directors, on a proposal from General Management.

The daily monitoring of compliance with the limits by the front office is carried out by the Risk Department on market transactions. This continuous monitoring of the risk profile is the subject of frequent exchanges between the risk and business teams, which may result in various positions hedging actions by the front office aimed at reducing the level of risk of complying with the framework defined. In the event of an overrun, the front office must detail the reasons for the management concerned, and take the necessary measures to return to the defined framework, or otherwise request a temporary or permanent increase in the limit if customer demand, market conditions or risk assessment justify it.

Resecuritisation exposures go through the same approval and monitoring process.

STRUCTURAL AND LIQUIDITY RISKS

The management of structural interest rate and change risks in securitisation activities does not differ from that of other Group assets.

The management of the structural interest rate risk is described in Chapter 11 of this document.

The liquidity risk linked to securitisation activities is monitored both at the level of the responsible business lines but also, centrally, at the level of the Finance Department, with in particular the measurement of the impact of these activities on liquidity ratios, stress tests and the Group's liquidity gaps. The organisation and management of liquidity risk are covered in Chapter 12 of this document.

OPERATIONAL RISK

The monitoring of operational risk on securitisation activities is taken into account in the Group's operational risk management systems. Thus, the operational risks on these activities are notably regulated by the limits of the appetite for operational risk, identified and assessed by the Risk Control Self-Assessment exercise and any incidents are collected and analysed according to Group standards. The management of operational risk is described in Chapter 10 of this document.

8.5 SOCIETE GENERALE'S SECURITISATION ACTIVITIES

Securitisation activities allow the Group to raise liquidity or manage risk exposures, for proprietary purposes or on behalf of customers. Within the framework of these activities, the Group can act as originator, sponsor/arranger or investor:

- as an originator, the Group directly or indirectly participates in the initial agreement on assets which subsequently serve as underlying in securitisation transactions, primarily for refinancing purposes;
- as a sponsor, the Group establishes and manages a securitisation programme used to refinance customers' assets, mainly *via* the Antalis and Barton conduits and *via* certain other special purpose vehicles;
- as an investor, the Group invests directly in certain securitisation positions, is a liquidity provider or a counterparty of derivative exposures.

This information must be considered within the context of the specific structure of each transaction and vehicle, which cannot be described in this report. Taken separately, the level of payments past due or in default does not provide sufficient information on the types of exposures securitised by the Group, mainly because the default criteria may vary from one transaction to another. Furthermore, these data reflect the situation of the underlying assets.

In securitisation transactions, past due exposures are generally managed *via* structural mechanisms that protect the most senior positions.

Impaired exposures belong mainly to CDOs of US subprime residential mortgages, dating back to 2014.

As part of its securitisation activities, the Group does not provide any implicit support in accordance with Article 248, paragraph 1, of the CRR.

Since the protection purchased is financed, there is no counterparty credit risk on the vendor of the insurance. The Group does not intend to purchase unfunded protection at this stage.

SOCIETE GENERALE AS ORIGINATOR

As part of its refinancing activities, the Group undertakes securitisations of some of its portfolios of receivables originated with individuals or corporate customers. The securities created in these transactions can be either sold to external investors, thus providing funding to the Group, or retained by the Group to be used as collateral in repurchase transactions, notably with the European Central Bank.

In 2020, two new securitsation transactions were carried out:

- EUR 1.0 billion securitisation of auto loans, publicly placed to provide external funding and reduce RWA consumption;
- EUR 0.4 billion securitisation of auto lease receivables, publicly placed for EUR 0.35 billion of funding.

Given that there is no significant risk transfer arising from the Group's securitisation transactions for its refinancing activities, these transactions have no impact on the Group's regulatory capital and are therefore not included in the tables in this section.

The vehicles holding the transferred receivables are consolidated by the Group and the Group remains exposed to the majority of the risks and rewards related to the receivables. Furthermore, the receivables cannot be used as collateral or sold outright as part of another transaction.

The total outstanding of the receivables securitised without significant risk transfer amounted to EUR 12.4 billion as at 31 December 2020, including EUR 5.4 billion of French home loans, EUR 1.8 billion of German auto loans, EUR 3.3 billion of French consumer loans and EUR 1.9 billion of auto lease receivables and related residual values.

Besides, the Group also detains several synthetic securitisation programmes in which the risk transfer is made by using credit derivatives or financial guarantees and where the portfolio is kept in the balance sheet of the Group.

The securitised stock of these transactions stood at EUR 16.5 billion as at 31 December 2020, mainly composed of loans to corporates.

Societe Generale did not securitise revolving exposures subject to early amortisation treatment in which the level of credit risk to which the originator is exposed may increase following the execution of the early amortisation provision.

SOCIETE GENERALE AS SPONSOR

The Societe Generale group carries out transactions on behalf of its customers or investors. At 31 December 2020, there were two consolidated multi-seller vehicles in operation (Barton and Antalis), structured by the Group on behalf of clients. This ABCP (Asset-Backed Commercial Paper) activity funds the working capital requirements of some of the Group's customers by backing short-term financing with traditional assets such as trade receivables or consumer loans. Total assets held by these vehicles and financed through the issuance of commercial paper amounted to EUR 14.4 billion at 31 December 2020 (EUR 14.2 billion at 31 December 2019).

As part of the implementation of the new IFRS 10 standard on 1 January 2014, Societe Generale has consolidated these two vehicles, Barton and Antalis, from this date onwards.

ABCP activity remained solid in 2020, with newly securitised outstanding amounts predominantly comprising trade receivables, leasing or consumer loans.

SOCIETE GENERALE AS INVESTOR

Societe Generale also acts as a market-maker for securitised assets, resulting in securitisation positions in the Group's trading book. Since 31 December 2011, CRD3 has required the same prudential treatment regardless of prudential classification.

The following tables show the securitisation exposures retained or purchased by the Group by type of underlying assets, by region, by type of tranche, separately for the banking book and for the trading book. These tables only feature the exposures with an impact on the Group's regulatory capital.

TABLE 77: AMOUNTS OF SECURITISED EXPOSURES BY TYPE OF UNDERLYING ASSETS

	31.12.2020							
	Banking Book				Trading Book			
(In EURm)	Traditional transactions		Synthethic transactions		Traditional transactions		Synthethic transactions	
Underlying assets	**Originator**	**Sponsor**	**Originator**	**Sponsor**	**Originator**	**Sponsor**	**Originator**	**Sponsor**
Residential mortgages	-	181	-	-	-	-	-	-
Commercial mortgages	-	84	-	-	-	-	-	-
Credit card receivables	-	2,302	-	-	-	-	-	-
Leasing	-	1,396	-	-	-	-	-	-
Loans to corporates and SMEs	1,969	2,299	15,703	-	-	-	-	-
Consumer loans	-	7,622	-	-	-	-	-	-
Trade receivables	-	6,845	-	-	-	-	-	-
Other assets	-	998	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-
Other liabilites	-	-	-	-	-	-	-	-
TOTAL	**1,969**	**21,727**	**15,703**	**-**	**-**	**-**	**-**	**-**

	31.12.2019							
	Banking Book				Trading Book			
(In EURm)	Traditional transactions		Synthethic transactions		Traditional transactions		Synthethic transactions	
Underlying assets	**Originator**	**Sponsor**	**Originator**	**Sponsor**	**Originator**	**Sponsor**	**Originator**	**Sponsor**
Residential mortgages	-	236	-	-	-	-	-	-
Commercial mortgages	-	7	-	-	-	-	-	-
Credit card receivables	-	2,065	-	-	-	-	-	-
Leasing	-	1,417	-	-	-	-	-	-
Loans to corporates and SMEs	-	2,165	11,826	-	-	-	-	-
Consumer loans	-	7,268	-	-	-	-	-	-
Trade receivables	-	7,012	-	-	-	-	-	-
Other assets	-	1,082	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-
Other liabilites	-	-	-	-	-	-	-	-
TOTAL	**-**	**21,252**	**11,826**	**-**	**-**	**-**	**-**	**-**

TABLE 78: AMOUNTS OF SECURITISED EXPOSURES THAT ARE PAST DUE OR IMPAIRED BY TYPE OF UNDERLYING ASSETS IN THE BANKING BOOK

	31.12.2020				31.12.2019			
(In EURm)	Past due		Impaired		Past due		Impaired	
Underlying assets	**Originator**	**Sponsor**	**Originator**	**Sponsor**	**Originator**	**Sponsor**	**Originator**	**Sponsor**
Residential mortgages	-	-	-	-	-	-	-	-
Commercial mortgages	-	-	-	-	-	-	-	-
Credit card receivables	-	17	-	8	-	31	-	20
Leasing	-	39	-	4	-	16	-	19
Loans to corporates and SMEs	-	6	-	3	-	2	-	10
Consumer loans	-	67	-	44	-	40	-	16
Trade receivables	-	1,209	-	416	-	1,258	-	340
Other assets	-	2	-	1	-	3	-	2
Covered bonds	-	-	-	-	-	-	-	-
Other liabilites	-	-	-	-	-	-	-	-
TOTAL	**-**	**1,340**	**-**	**477**	**-**	**1,350**	**-**	**407**

TABLE 79: ASSETS AWAITING SECURITISATION BY TYPE OF UNDERLYING ASSETS

(In EURm)	31.12.2020	31.12.2019	31.12.2020	31.12.2019
Underlying assets	Banking book		Trading book	
Residential mortgages	-	-	-	-
Commercial mortgages	-	-	-	-
Credit card receivables	-	-	-	-
Leasing	667	1,500	-	-
Loans to corporates and SMEs	-	3,065	-	-
Consumer loans	1,000	-	-	-
Trade receivables	-	-	-	-
Other assets	-	-	-	-
Covered bonds	-	-	-	-
Other liabilites	-	-	-	-
TOTAL	**1,667**	**4,565**	**-**	**-**

TABLE 80: AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED BY TYPE OF UNDERLYING ASSETS IN THE BANKING BOOK

(In EURm)	31.12.2020			31.12.2019		
Underlying assets	On-balance sheet	Off-balance sheet	Total	On-balance sheet	Off-balance sheet	Total
Residential mortgages	-	181	181	-	236	236
Commercial mortgages	-	84	84	-	7	7
Credit card receivables	24	2,277	2,302	-	2,065	2,065
Leasing	-	1,396	1,396	-	1,418	1,418
Loans to corporates and SMEs	13,143	1,155	14,298	11,894	2,097	13,991
Consumer loans	5,728	7,567	13,295	-	7,276	7,276
Trade receivables	-	6,845	6,845	-	7,012	7,012
Other assets	71	927	998	-	1,082	1,082
Covered bonds	-	-	-	-	-	-
Other liabilites	-	-	-	-	-	-
TOTAL	**18,966**	**20,433**	**39,399**	**11,894**	**21,193**	**33,087**

As at 31 December 2020, securitisation exposures in the banking book amounted to EUR 39.4 billion, of which EUR 19.0 billion recorded on the balance sheet. The rest consists predominantly of liquidity lines linked to the Group's sponsor conduit activity. The main underlying assets are securitisations, corporate loans, consumer loans and trade receivables. In 2020, banking book exposures increased by EUR 6 billion, up 20% year-on-year.

TABLE 81: AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED BY TYPE OF UNDERLYING ASSETS IN THE TRADING BOOK

(In EURm)	31.12.2020		31.12.2019	
Underlying assets	**Net long positions**	**Net short positions**	**Net long positions**	**Net short positions**
Residential mortgages	43	-	86	-
Commercial mortgages	111	182	66	129
Credit card receivables	-	-	9	-
Leasing	11	-	7	-
Loans to corporates and SMEs	109	-	174	-
Consumer loans	15	-	-	-
Trade receivables	-	-	20	-
Other assets	-	-	-	-
Covered bonds	112	-	154	-
Other liabilites	-	-	-	-
TOTAL	**402**	**182**	**516**	**129**

TABLE 82: AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED BY REGION IN THE BANKING BOOK AND IN THE TRADING BOOK

(In EURm)	31.12.2020			31.12.2019		
		Trading book			Trading book	
Underlying assets	**Banking book**	**Long positions**	**Short positions**	**Banking book**	**Long positions**	**Short positions**
America	14,854	350	182	14,704	348	129
Asia	1,836	-	-	959	-	-
Europe	22,676	7	-	17,384	57	-
Others	33	45	-	41	111	-
TOTAL	**39,399**	**402**	**182**	**33,087**	**516**	**129**

The growth observed within the Banking book is mainly focused in Europe (+30%) and Asia.

TABLE 83: QUALITY OF SECURITISATION POSITIONS RETAINED OR PURCHASED BY TYPE OF UNDERLYING ASSETS IN THE BANKING BOOK

(In EURm)	31.12.2020					
	Nominal			Exposure At Default (EAD)		
Underlying assets	**Highest-ranking tranche**	**Mezzanine tranche**	**Initial loss tranche**	**Highest-ranking tranche**	**Mezzanine tranche**	**Initial loss tranche**
Residential mortgages	158	23	-	158	23	-
Commercial mortgages	84	-	-	85	-	-
Credit card receivables	2,294	8	-	2,294	8	-
Leasing	1,396	-	-	1,396	-	-
Loans to corporates and SMEs	13,719	-	579	12,041	-	579
Consumer loans	13,295	-	-	13,295	-	-
Trade receivables	6,845	-	-	6,941	-	-
Other assets	998	-	-	1,002	-	-
Covered bonds	-	-	-	-	-	-
Other liabilites	-	-	-	-	-	-
TOTAL	**38,790**	**31**	**579**	**37,212**	**31**	**579**

(In EURm)	31.12.2019					
	Nominal			Exposure At Default (EAD)		
Underlying assets	**Highest-ranking tranche**	**Mezzanine tranche**	**Initial loss tranche**	**Highest-ranking tranche**	**Mezzanine tranche**	**Initial loss tranche**
Residential mortgages	214	23	-	214	23	-
Commercial mortgages	7	-	-	7	-	-
Credit card receivables	2,056	9	-	2,063	9	-
Leasing	1,418	-	-	1,418	-	-
Loans to corporates and SMEs	13,128	361	503	12,808	361	503
Consumer loans	7,276	-	-	7,276	-	-
Trade receivables	7,012	-	-	7,012	-	-
Other assets	1,082	-	-	1,086	-	-
Covered bonds	-	-	-	-	-	-
Other liabilites	-	-	-	-	-	-
TOTAL	**32,192**	**392**	**503**	**31,884**	**392**	**503**

In the banking book, senior tranches made up 98% of securitisation positions retained or purchased as at 31 December 2020 and were mainly composed of consumer and corporate loans.

TABLE 84: QUALITY OF SECURITISATION POSITIONS RETAINED OR PURCHASED BY TYPE OF UNDERLYING ASSETS IN THE TRADING BOOK

(In EURm)	31.12.2020					
	Net long positions			Net short positions		
Underlying assets	Highest-ranking tranche	Mezzanine tranche	Initial loss tranche	Highest-ranking tranche	Tranche mezzanine	Initial loss tranche
Residential mortgages	31	13	-	-	-	-
Commercial mortgages	51	60	-	168	14	-
Credit card receivables	-	-	-	-	-	-
Leasing	11	-	-	-	-	-
Loans to corporates and SMEs	68	41	-	-	-	-
Consumer loans	15	-	-	-	-	-
Trade receivables	-	-	-	-	-	-
Other assets	-	-	-	-	-	-
Covered bonds	49	63	-	-	-	-
Other liabilites	-	-	-	-	-	-
TOTAL	**226**	**176**	**-**	**168**	**14**	**-**

(In EURm)	31.12.2019					
	Net long positions			Net short positions		
Underlying assets	Highest-ranking tranche	Mezzanine tranche	Initial loss tranche	Highest-ranking tranche	Tranche mezzanine	Initial loss tranche
Residential mortgages	26	60	-	-	-	-
Commercial mortgages	23	43	-	108	21	-
Credit card receivables	-	9	-	-	-	-
Leasing	1	6	-	-	-	-
Loans to corporates and SMEs	51	123	-	-	-	-
Consumer loans	-	-	-	-	-	-
Trade receivables	-	20	-	-	-	-
Other assets	-	-	-	-	-	-
Covered bonds	64	90	-	-	-	-
Other liabilites	-	-	-	-	-	-
TOTAL	**165**	**351**	**-**	**108**	**21**	**-**

Positions in the securitisation trading book are exclusively high ranking and mezzanine tranches. This applies to long and short positions.

8.6 PRUDENTIAL TREATMENT OF SECURITISATION POSITIONS

APPROACH FOR CALCULATING RISK-WEIGHTED EXPOSURES

Whenever traditional or synthetic securitisations, for which sponsorship, origination, structuring or management of Societe Generale is involved, achieve a substantial and documented risk transfer compliant with the regulatory framework, the underlying assets are excluded from the bank's calculation of risk-weighted exposures for traditional credit risk.

For the securitisation positions that Societe Generale decides to hold either on- or off-balance sheet, capital requirements are determined based on the bank's exposure, irrespective of its underlying strategy or role.

Institutions use one of the methods described in the hierarchy below to calculate the weighted exposure amounts:

- SEC-IRBA (approach based on internal ratings), when certain conditions are met;
- when the SEC-IRBA cannot be used, the intitution uses the SEC-SA (standardised approach);
- when the SEC-SA cannot be used, the institution uses the SEC-ERBA (approach based on external ratings) for positions with an external credit rating or those for which it is possible to infer such a note.

The unrated liquidity lines granted to ABCP programmes can be determined using the Internal Assessment Approach (IAA). With regard to the liquidity lines that the bank grants to the securitisation conduits it sponsors, Societe Generale obtained approval in 2009 to use the internal assessment approach. As such, Societe Generale has developed a rating model (IAA approach), which estimates the expected loss (Expected Loss - EL) for each Group's exposure to securitisation conduits, which automatically leads to a capital weighting by application of a correspondence table defined by the regulations. An annual review of the model makes it possible to verify that the performance and conservatism of the model. Also, in-depth analyses are carried out on inputs (transaction details such as default, dilution, or reserve rates), model parameters (transition matrices, PD, LGD) and an EL backtest. Methodological benchmarks are also regularly carried out in order to validate our internal approach in comparison with the best practices of the market.

In the other cases, the securitisation positions receive a risk weight of 1,250%.

EXTERNAL CREDIT ASSESSMENT INSTITUTIONS USED BY SOCIETE GENERALE

Assets securitised by Societe Generale are usually rated by one or more ECAIs (External Credit Assessment Institutions), the list of which is established by the French prudential supervisory authority ACPR (*Autorité de Contrôle Prudentiel et de Résolution*). The agencies used are DBRS, FitchRatings, Moody's Investors Service and Standard & Poor's. All four rating agencies have been registered with and supervised by the European Securities and Market Authority (ESMA) since 31 October 2011. The capital requirements for securitisation positions valued using the standardised approach are calculated based on the lowest external rating of the securitisation exposure.

An equivalence (see table 29, p. 84) between external ratings and Societe Generale's internal rating scale is provided, presenting Societe Generale's internal rating scale and the corresponding scales of the main ECAIs, as well as the corresponding average estimated probabilities of default.

TABLE 85: CREDIT RATING AGENCIES USED IN SECURITISATIONS BY TYPE OF UNDERLYING ASSETS

Underlying assets	MOODY'S	FITCH	S&P	DBRS
Residential mortgages	✓	✓	✓	
Commercial mortgages	✓	✓	✓	
Credit card receivables	✓		✓	
Leasing	✓	✓	✓	
Loans to corporates and SMEs	✓	✓	✓	✓
Consumer loans	✓		✓	
Trade receivables	✓			
Other assets	✓			
Covered bonds	✓	✓	✓	
Other liabilites				

REGULATORY CAPITAL REQUIREMENTS

The following tables show the bank's securitisation exposures and corresponding regulatory capital requirements for the Banking Book at 31 December 2020 and at 31 December 2019.

TABLE 86: AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED IN THE BANKING BOOK BY APPROACH AND BY RISK WEIGHT

		2020							
		Exposure at Defaut (EAD)				Capital Requirements			
		Securitisation		Re-securitisation		Securitisation		Re-securitisation	
(In EURm)	Risk wieght band	STS	Non STS	STS	Non STS	STS	Non STS	STS	Non STS
Exposure values by RW bands/deductions	≤ 20% RW	8,644	27,795	-	-	56	342	-	-
	> 20% à 50% RW	-	1,158	-	-	-	28	-	-
	> 50% à 100% RW	-	199	-	-	-	12	-	-
	> 100% à 1250% RW	-	0	-	-	-	0	-	-
	1250% RW	-	-	-	-	-	-	-	-
	Deductions	12	14	-	-	-	-	-	-
Exposure values by regulatory approach	SEC-IRBA	-	14,596	-	-	-	179	-	-
	SEC-ERBA (including IAA)	7,053	12,579	-	-	-	180	-	-
	SEC-SA	1,591	1,976	-	-	56	24	-	-
	1250% RW	-	-	-	-	-	-	-	-
	Deductions	12	14	-	-	-	-	-	-
TOTAL BANKING BOOK		**8,656**	**29,165**	**-**	**-**	**56**	**382**	**-**	**-**

As at 31 December 2020, 77% of banking book securitisation exposures were non-STS. 52% of exposures were weighted using the SEC-ERBA/IAA method, 39% using the SEC-IRBA.

		2019							
		Exposure at Defaut (EAD)				Capital Requirements			
		Securitisation		Re-securitisation		Securitisation		Re-securitisation	
(In EURm)	Risk weight band	STS	Non STS	STS	Non STS	STS	Non STS	STS	Non STS
Exposure values by RW bands/deductions	≤ 20% RW	946	30,722	-	-	-	288	-	-
	> 20% à 50% RW	-	544	-	-	-	10	-	-
	> 50% à 100% RW	-	48	-	-	-	3	-	-
	> 100% à 1250% RW	-	-	-	-	-	-	-	-
	1250% RW	-	-	-	-	-	-	-	-
	Deductions	-	16	-	-	-	-	-	-
Exposure values by regulatory approach	SEC-IRBA	-	10,104	-	-	-	149	-	-
	SEC-ERBA (including IAA)	-	20,873	-	-	-	147	-	-
	SEC-SA	946	336	-	-	-	5	-	-
	1250% RW	-	-	-	-	-	-	-	-
	Deductions	-	16	-	-	-	-	-	-
TOTAL BANKING BOOK		**946**	**31,330**	**-**	**-**	**-**	**301**	**-**	**-**

TABLE 87: AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED IN THE TRADING BOOK BY APPROACH AND BY RISK WEIGHT

		2020							
		Exposure at Defaut (EAD)				Capital Requirements			
		Securitisation		Re-securitisation		Securitisation		Re-securitisation	
(In EURm)	Risk wieght band	STS	Non STS	STS	Non STS	STS	Non STS	STS	Non STS
Exposure values by RW bands/deductions	≤ 20% RW	11	332	-	-	0	4	-	-
	> 20% à 50% RW	-	71	-	-	-	2	-	-
	> 50% à 100% RW	-	24	-	-	-	1	-	-
	> 100% à 1250% RW	-	144	-	-	-	36	-	-
	1250% RW	-	-	-	-	-	-	-	-
	Deductions	-	2	-	-	-	-	-	-
Exposure values by regulatory approach	SEC-IRBA	-	-	-	-	-	-	-	-
	SEC-IAA	7	285	-	-	0	39	-	-
	SEC-SA	3	286	-	-	0	4	-	-
	1250% RW	-	-	-	-	-	-	-	-
	Deductions	-	2	-	-	-	-	-	-
TOTAL TRADING BOOK		**11**	**573**	**-**	**-**	**0**	**43**	**-**	**-**

		2019							
		Exposure at Defaut (EAD)				Capital Requirements			
		Securitisation		Re-securitisation		Securitisation		Re-securitisation	
(In EURm)	Risk wieght band	STS	Non STS	STS	Non STS	STS	Non STS	STS	Non STS
Exposure values by RW bands/deductions	≤ 20% RW	-	108	-	-	-	1	-	-
	> 20% à 50% RW	29	375	-	-	0	6	-	-
	> 50% à 100% RW	-	59	-	-	-	6	-	-
	> 100% à 1250% RW	-	62	-	-	-	7	-	-
	1250% RW	-	3	-	-	-	3	-	-
	deductions	-	9	-	-	-	-	-	-
Exposure values by regulatory approach	SEC-IRBA	-	-	-	-	-	-	-	-
	SEC-ERBA (including IAA)	29	604	-	-	0	19	-	-
	SEC-SA	-	-	-	-	-	-	-	-
	1250% RW	-	3	-	-	-	3	-	-
	deductions	-	9	-	-	-	-	-	-
TOTAL TRADING BOOK		**29**	**616**	**-**	**-**	**0**	**22**	**-**	**-**

TABLE 88: SECURITISATION EXPOSURES DEDUCTED FROM OWN FUNDS BY TYPE OF UNDERLYING ASSETS

(In EURm)	31.12.2020	31.12.2019	31.12.2020	31.12.2019
Underlying assets	**Banking Book**		**Trading Book**	
Residential mortgages	-	-	2	9
Commercial mortgages	0	-	0	-
Credit card receivables	-	-	-	-
Leasing	-		-	-
Loans to corporates and SMEs	12	7	-	-
Consumer loans	14	9	-	-
Trade receivables	-	-	-	-
Other assets	-	-	-	-
Covered bonds	-	-	0	-
Other liabilites	-	-	-	-
TOTAL	**26**	**16**	**2**	**9**

TABLE 89: REGULATORY CAPITAL REQUIREMENTS RELATING TO SECURITISATIONS RETAINED OR PURCHASED IN THE TRADING BOOK

	31.12.2020				31.12.2019			
(In EURm)	**Net long positions**	**Net short positions**	**Total risk-weighted positions**	**Capital requirements**	**Net long positions**	**Net short positions**	**Total risk-weighted positions**	**Capital requirements**
Securitisation	402	182	534	43	516	129	277	22
Re-securitisation	-	-	-	-	-	-	-	-
Positions deducted from capital	-	-	-	2	-	-	-	9

TABLE 90: RE-SECURITISATION POSITIONS RETAINED OR PURCHASED

	31.12.2020				31.12.2019			
(In EURm)	**Banking Book**		**Trading Book**		**Banking Book**		**Trading Book**	
	Before hedging/ insurances	**After hedging/ insurances**	**Before hedging/ insurances**	**After hedging/ insurances**	**Before hedging/ insurances**	**After hedging/ insurances**	**Before hedging/ insurances**	**After hedging/ insurances**
Re-securitisation	0	0	0	0	0	0	0	0

All re-securitisation positions have reached maturity. There were no financial guarantors on these exposures.

9

MARKET RISK

IN BRIEF

Market risk is the risk 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, the price of securities (equities or bonds), commodities, derivatives and other assets.

Market risk RWA at end 2020

EUR 15.3bn

(Amount at end 2019: EUR 14.5bn)

Annual average VaR
(1 day, 99%) - 2020

EUR 33m

(Annual average VaR 2019: EUR 23m)

Share of RWA calculated
via the internal model

89%

Market risk is the risk 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, the price of securities (equities or bonds), commodities, derivatives and other assets.

9.1 ORGANISATION OF MARKET RISK MANAGEMENT

Main functions

Although primary responsibility for managing risk exposure relies on the front office managers, the supervision system comes under the Market Risk Department of the Risk Division, which is independent from the businesses.

This department:

- checks the existence of an effective market risk monitoring framework based on suitable limits;
- assesses the limit requests submitted by the different businesses within the framework of the overall limits authorised by the Board of Directors and General Management, and based on the use of these limits;
- proposes appropriate market risk limits by Group activity to the Group Risk Committee;
- defines indicators used to monitor market risk;
- calculates and certifies on a daily basis, market risk indicators and P&L resulting from market activities, based on formal and secure procedures, then reports and analyses these indicators;
- monitors on a daily basis the limits set for each activity.

In order to perform its tasks, the department also defines the architecture and the functionalities of the information system used to produce the risk and P&L indicators for market transactions, and ensures it meets the needs of the different businesses and of the Market Risk Department.

This department contributes to the detection of possible rogue trading operations through a monitoring mechanism based on alert levels (on gross nominal value of positions for example) applied to all instruments and desks.

Governance

In terms of governance, within the Market Risk Department, the main functional and transversal subjects are dealt with during Committees organised by value chains (market risk, P&L, etc.). These Committees are decision-making bodies, composed of senior representatives from each relevant Department teams and regions. Market risks oversight is provided by various Committees at different levels of the Group:

- the Risk Committee of the Board of Directors is informed of the Group's major market risks; in addition, it issues a recommendation on the most substantial proposed changes in terms of market risk measurement and framework (after prior approval by the CORISQ); this recommendation is then referred to the Board of Directors for a decision;
- the Risk Committee (CORISQ), chaired by the Chief Executive Officer of the Group, is regularly informed of Group-level market risks. Moreover, upon a proposal from the Market Risk Department, it validates the main choices with regard to market risk measurement, as well as the key developments on the architecture and implementation of the market risk framework at Group level;
- the market risks related to the Global Markets Division are reviewed during the Market Risk Committee (MRC) led by the Market Risk Department and co-chaired by the Risk Division and by the Global Markets Division. This Committee provides information on risk levels for the main risk indicators as well as for some specific activities pointed out depending on market or business driven events. It also provides an opinion on the market risk framework changes falling under the remit of the Risk Division and Global Markets Division.

In addition to these Committees, detailed and summary market risk reports, produced on a daily, weekly, monthly or quarterly basis, either related to various Group levels or geographic areas, are sent to the relevant business line and risk function managers.

9.2 MARKET RISK MONITORING PROCESS

Market risk appetite

The business development strategy of the Group for market activities is primarily focused on meeting client needs, with a full range of products and solutions. The risk resulting from these market activities is strictly managed through a set of limits for several indicators:

- the Value-at-Risk (VaR) and stressed Value-at-Risk (SVaR): these global indicators are used for market risk calculations for RWA and for the day-to-day monitoring of the market risks incurred by the Group within the scope of its trading activities;
- stress test measurements, based on decennial shock-type indicators, which make it possible to restrict the Group's exposure to systemic risk and exceptional market shocks. These measurements can be global, multi-risk factor (based on historic or hypothetical scenarios), by activity or risk factor in order to take into account extreme risks on a specific market, or event-driven, to temporarily monitor a particular situation;
- sensitivity and nominal indicators used to manage the size of positions:
  - sensitivities are used to monitor the risk incurred locally on a given type of position (*e.g.* sensitivity of an option to changes in the underlying asset),
  - while nominal indicators are used for significant positions in terms of risk;
- additional indicators such as concentration risk or holding period, maximum maturity, etc.

The Market Risk Department is responsible for the assessment and validation of the limit requests submitted by the different business lines. These limits ensure that the Group complies with the market risk appetite approved by the Board of Directors, further to a proposal from General Management[1].

Determining and monitoring limits

The choice and calibration of these limits ensure the operational transposition of the Group's market risk appetite through its organisation:

- these limits are allocated at various levels of the Group's structure and/or by risk factor;
- their calibration is determined using a detailed analysis of the risks related to the portfolio managed. This analysis may include various elements such as market conditions, specifically liquidity, position maneuverability, risk/rewards analysis, etc.;
- regular reviews make it possible to manage risks according to the prevailing market conditions;
- specific limits, or even bans, may be put in place to manage risks for which the Group has little or no risk appetite.

The desk mandates and Group policies stipulate that traders must have a sound and prudent management of positions and must respect the defined frameworks. The limits set for each activity are monitored daily by the Market Risk Department. This continuous monitoring of the market risk profile is the object of regular discussions between the risk and business teams, further to which various risk hedging or mitigation initiatives may be taken by the Front Office in order to remain within the defined limits. In the event of a breach of the risk framework, the front office must detail the reasons, and take the necessary measures to return within the defined framework, or otherwise request a temporary or permanent increase of limit if the clients requests and if market conditions justify such a course of action.

In addition to the governance structure in place between the various departments of the Risk function and business lines, the monitoring of limits usage, due to the products/solutions provided to clients and the market-making activities, also contributes to ensuring that market risk to which the Group is exposed are properly managed and understood.

(1) See "Risk Appetite" section for the detailed description of the governance and implementation of the risk appetite, as well as the role the Risk Division plays in defining it.

9.3 MARKET RISK MAIN MEASURES

Stress test assessment

Societe Generale monitors its exposure using stress test simulations to take into account exceptional market disruptions.

A stress test estimates the loss resulting from an extreme change in market parameters over a period corresponding to the time required to unwind or hedge the positions affected.

Two major metrics are defined and used:

- the Global Stress Test on market activities, which estimates the losses linked to market risks, market/counterparty cross-risk, and dislocation and carry risk on exotic activities, that could arise simultaneously in the event of a severe but plausible systemic crisis. This stress test is modeled on five scenarios;
- the Market Stress Test, which focuses solely on market risks, applying the same scenarios as the Global Stress Test and additional scenarios corresponding to different market conditions.

The various scenarios for those stress tests are reviewed by the Risk Division on a regular basis. These reviews are presented during dedicated biannual Committees, chaired by the Market Risk Department and attended by economists and representatives of Societe Generale's trading activities. These Committees cover the following topics: changes in scenarios (introduction, removal, shock review), appropriate coverage of the risk factors by the scenarios, review of the approximations made in terms of calculation, correct documentation of the whole process. The delegation level needed to validate the changes in stress test scenarios depends on the impact of the change in question.

These stress tests are applied throughout all the Bank's market activities. Stress test limits are established for Societe Generale's activity as a whole (and then for the Group's various business lines for the Market Stress Test). Together with the VaR model, these stress test risk assessments are one of the main pillars of the risk management framework.

GLOBAL STRESS TEST ON MARKET ACTIVITIES

The Global Stress Test on market activities is the main risk indicator used on this scope. It covers all the risks on market activities that would occur simultaneously in case of a severe, but plausible, market crisis. The impact is measured over a short period of time with an expected occurrence of once per decade. The Global Stress Test uses five market scenarios and has three components, each of which are considered in each of the five scenarios in order to ensure consistency within the same scenario:

- market risk;
- dislocation and carry risks on exotic activities related to concentration effects and crowded trades;
- market/counterparty cross-risks arising in transactions with weak counterparties (hedge funds and proprietary trading groups).

The Global Stress Test corresponds to the least favourable results arising from the five scenarios and their respective components.

Market risk component

It corresponds to:

- the results of the Market Stress Test[1] restricted to scenarios that could cause dislocation effects on market positions and default by weak counterparties. These scenarios all simulate a sharp fall in the equity markets and a widening in credit spreads which could trigger dislocation effects. Following the last review of the scenarios at the end of 2020, it was decided to use for the calculation of the stress test three theoretical scenarios (generalised (*i.e.* financial crisis scenario), eurozone crisis, general decline in risk assets) and two historical scenarios focusing respectively on the period of early October 2008 and early March 2020;
- the impact of the stress test scenario on CVA (Credit Value Adjustment) and FVA (Funding Value Adjustment) reserves, as their variations affect trading results.

Dislocation and carry risk component

Additional market risks to those assessed in the Market Stress Test can occur in market situation in which one or more participants – generally structured products sellers – have concentrated or crowded trades. Dynamic risk hedging strategies can cause larger market dislocations than those calibrated in the Market Stress Test, and these dislocations can extend beyond the shock timeline used due to an imbalance between supply and demand.

Equity, credit, fixed income, currency and commodity trading activities are regularly reviewed to identify these areas of risk and to define a scenario that takes into account the specific features of each activity and position. Each scenario associated with an identified area of risk is added to the market risk component if – and only if – it is compatible with the market scenario in question.

Market/counterparty cross-risk component on weak counterparties

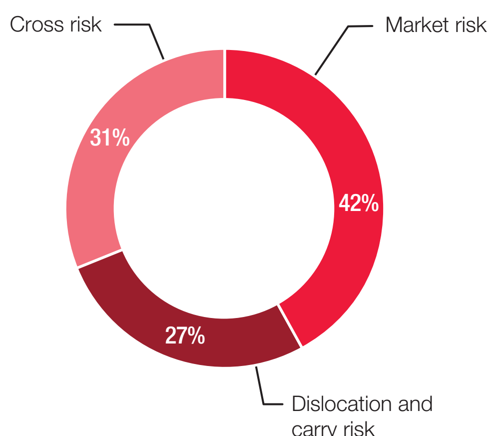
Some counterparties may be significantly affected by a major crisis on the financial markets and their probability of default may increase. The third component of the Global Stress Test therefore aims to take into account this increased risk on certain types of weak counterparties (hedge funds and proprietary trading groups).

Two measurements are used:

- **the collateralised financing stress test:** this stress test focuses on collateralised financing activities and more specifically on weak counterparties. It applies a dislocation shock to several asset classes with the assumption of extremely tight liquidity conditions. Collateral and counterparty default rates are stressed concomitantly, taking into account any consanguinity with the collateral posted;
- **the adverse stress test on hedge funds and proprietary trading groups (PTG):** this stress test applies two stress scenarios to all market transactions qualifying for replacement risk with this type of counterparties. A stressed probability of default – based on the counterparty's ratings – is taken into account.

(1) Measurement of the impact in the Net Banking Product in case of shocks on all risk factors (refer to below description).

AVERAGE CONTRIBUTION OF THE COMPONENTS IN 2020 GLOBAL STRESS TEST ON MARKET ACTIVITIES



MARKET STRESS TEST

This metric focuses on market risk and estimates the loss resulting from shocks on the set of risk factors. This stress test is based on 11 scenarios[1] (four historical and seven hypothetical). Main principles are as follows:

- the scenario considered in the market stress test is the worst of the different scenarios defined;
- the shocks applied are calibrated on time horizons specific to each risk factor (the time horizon can range from five days for the most liquid risk factors to three months for the least liquid);
- risks are calculated every day for each of the Bank's market activities (all products together), using each of the historical and hypothetical scenarios.

Historical scenarios

This method consists of an analysis of the major economic crises that have affected the financial markets: changes in the prices of financial assets (equities, interest rates, exchange rates, credit spreads, etc.) during each of these crises have been analysed in order to define scenarios for potential variations in these main risk factors which, when applied to the Bank's trading positions, could generate significant losses. Accordingly, this approach makes it possible to determine the historical scenarios used for the calculation of the stress test. This set of scenarios is also the subject of regular reviews. In 2020, two new historical scenarios related to the Covid-19 crisis were integrated: a crisis scenario (marked by a decline in equity indices and an increase in credit spreads) as well as a rebound scenario (marked by an increase in equity indices and a decrease in credit spreads). Societe Generale is currently using four historical scenarios in the calculation of the stress test, which cover the periods from October to December 2008 and March 2020.

Hypothetical scenarios

The hypothetical scenarios are defined with the Group's economists and are designed to identify possible sequences of events that could lead to a major crisis in the financial markets (*e.g.* a major terrorist attack, political instability in the main oil-producing countries, etc.). The Group's aim is to select extreme but plausible events which would have major repercussions on all international markets. Accordingly, Societe Generale has defined seven hypothetical scenarios.

Regulatory indicators

99% VALUE-AT-RISK (VAR)

Methodology

The Internal VaR Model was introduced at the end of 1996 and has been approved by the French regulator within the scope of the regulatory capital requirements.

The Value-at-Risk (VaR) assesses the potential losses on positions over a defined time horizon and for a given confidence interval (99% for Societe Generale). The method used is the "historical simulation" method, which implicitly takes into account the correlation between the various markets, as well as general and specific risk. It is based on the following principles:

- storage in a database of the risk factors that are representative of Societe Generale's positions (*i.e.* interest rates, share prices, exchange rates, commodity prices, volatility, credit spreads, etc.). Controls are regularly performed in order to check that all major risk factors for the trading portfolio of the Group are taken into account by the internal VaR model;
- definition of 260 scenarios corresponding to one-day variations in these market parameters over a rolling one-year period; these scenarios are updated daily with the inclusion of a new scenario and the removal of the oldest scenario. There are three coexisting methods for modelling scenarios (relative shocks, absolute shocks and hybrid shocks), the choice between these methods for a given risk factor is determined by its nature and its historical trend;
- the application of these 260 scenarios to the market parameters of the day;
- revaluation of daily positions, on the basis of the 260 sets of adjusted market parameters: in most cases this calculation involves a full repricing. Nonetheless, for certain risk factors, a sensitivity-based approach may be used.

Main risk factors	Description
Interest rates	Risk resulting from changes in interest rates and their volatility on the value of a financial instrument sensitive to interest rates, such as bonds, interest rate swaps, etc.
Share prices	Risk resulting from variations in prices and volatility of shares and equity indices, in the level of dividends, etc.
Exchange rates	Risk resulting from the variation of exchange rates between currencies and of their volatility.
Commodity prices	Risk resulting from changes in prices and volatility of commodities and commodity indices.
Credit Spreads	Risk resulting from an improvement or a deterioration in the credit quality of an issuer on the value of a financial instrument sensitive to this risk factor such as bonds, credit derivatives (credit default swaps for example).

(1) *Including the ones used in the global stress tests on market activities.*

Within the framework described above, the one-day 99% VaR, calculated according to the 260 scenarios, corresponds to the mean of the second and third largest losses computed, without applying any weighting to the scenarios.

The day-to-day follow-up of market risk is performed *via* the one-day VaR, which is calculated on a daily basis at various granularity levels. Regulatory capital requirements, however, oblige us to take into account a ten-day horizon, thus we also calculate a ten-day VaR, which is obtained by multiplying the one-day VaR aggregated at Group level by the square root of 10. This methodology complies with regulatory requirements and has been reviewed and validated by the regulator.

The VaR assessment is based on a model and a certain number of conventional assumptions, the main limitations of which are as follows:

- by definition, the use of a 99% confidence interval does not take into account losses arising beyond this point; VaR is therefore an indicator of the risk of loss under normal market conditions and does not take into account exceptionally significant fluctuations;
- VaR is computed using closing prices, meaning that intraday fluctuations are not taken into account;
- the use of a historical model is based on the assumption that past events are representative of future events and may not capture all potential events.

The Market Risk Department mitigates the limitations of the VaR model by performing stress tests and other additional measurements.

The same model is used for the VaR computation for almost all of Global Banking & Investor Solution's activities (including those related to the most complex products) and the main market activities of Retail Banking and Private Banking. The few activities not covered by the VaR method, either for technical reasons or because the stakes are too low, are monitored using stress tests, and capital charges are calculated using the standard method or through alternative in-house methods. The main market risk not covered by an internal model is the exchange risk of the banking book, which is not subject to a daily revaluation by construction and therefore cannot be taken into account in a VaR calculation.

Backtesting

The relevance of the model is checked through continuous backtesting in order to verify whether the number of days for which the negative result exceeds the VaR complies with the 99% confidence interval. The results of the backtesting are audited by the Risk Department in charge of the validation of internal models, which, as second line of defence, also assesses the theoretical robustness (from a design and development standpoint), the correctness of the implementation and the adequacy of the model use. The independent review process ends with (i) review and approval Committees and (ii) an Audit Report detailing the scope of the review, the tests performed and their outcomes, the recommendations and the conclusion of the review. The model control mechanism gives rise to reporting to the appropriate authorities.

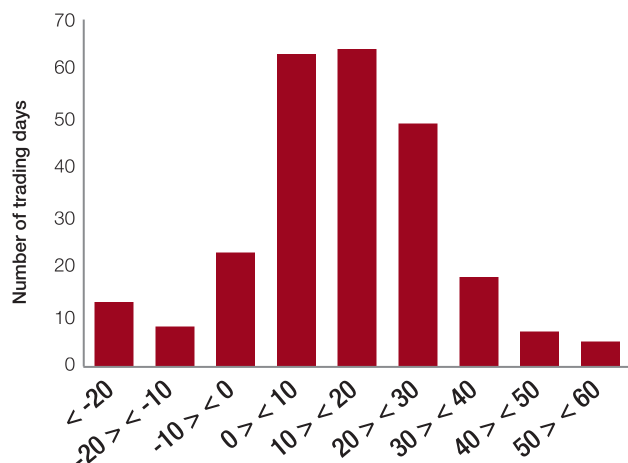
In compliance with regulations, backtesting compares the VaR to the (i) actual and (ii) hypothetical change in the portfolio's value:

- in the first case (backtesting against "actual P&L"), the daily P&L[1] includes the change in book value, the impact of new transactions and of transactions modified during the day (including their sales margins), refinancing costs, the various related commissions (brokerage fees, custody fees, etc.), as well as provisions and parameter adjustments made for market risk;
- in the second case (backtesting against "hypothetical P&L"), the daily P&L[2] includes only the change in book value related to changes in market parameters and excludes all other factors.

As a result of the Covid-19 crisis, markets were impacted, particularly in the first half of 2020, by high volatility across all asset classes. Daily losses on market activities were recorded 44 times. A breach of VaR backtesting was observed at Societe Generale Group level on 13 days. Following the decision of the European Parliament to authorise the exclusion of backtesting events occurring between 1 January 2020 and 31 December 2021 not attributable to internal model, the competent authorities have validated the exclusion of such events from the calculation of Societe Generale's risk-weighted assets for market risk. Three VaR backtesting breaches were finally maintained at Group level, against hypothetical result, in particular as a result of the VaR model not taking into account movements on share dividends once they are announced.

(1) "Actual P&L" by agreement hereinafter.
(2) "Hypothetical P&L" by agreement hereinafter.

BREAKDOWN OF THE DAILY[1] P&L OF MARKET ACTIVITIES (2020, IN EURM)



TRADING VAR (ONE-DAY, 99%), DAILY ACTUAL P&L[2] AND DAILY HYPOTHETICAL P&L[3] OF THE TRADING PORTFOLIO (2020, IN EURM)

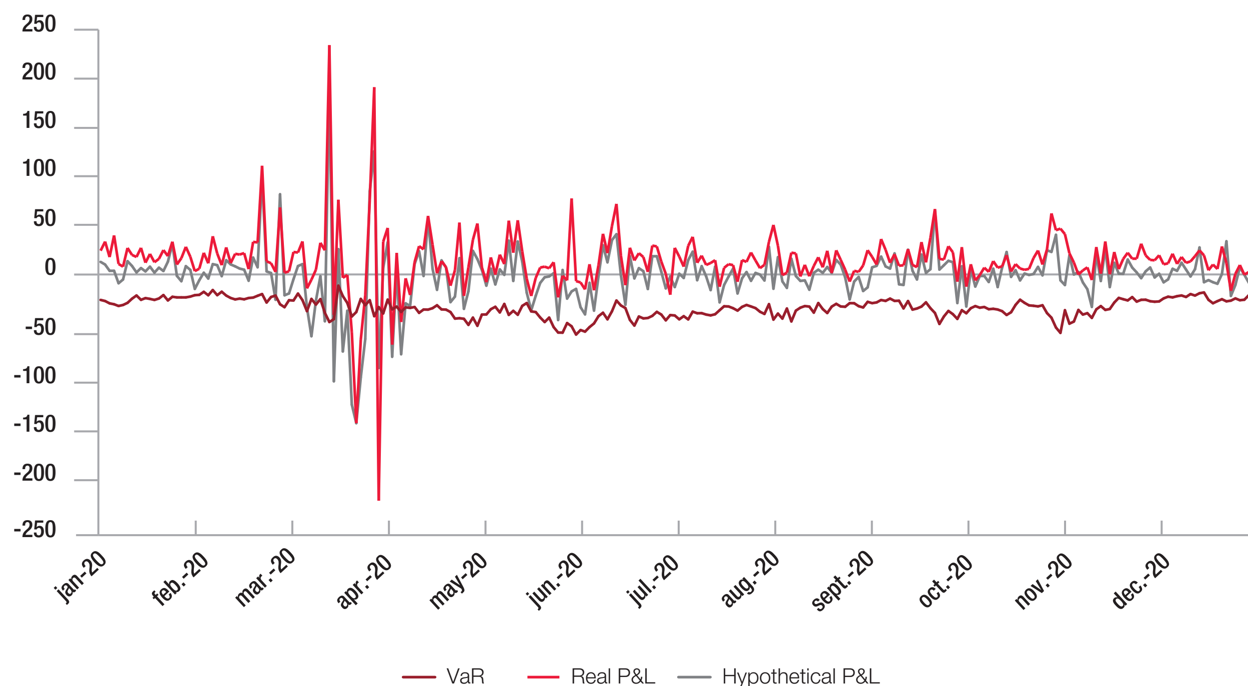


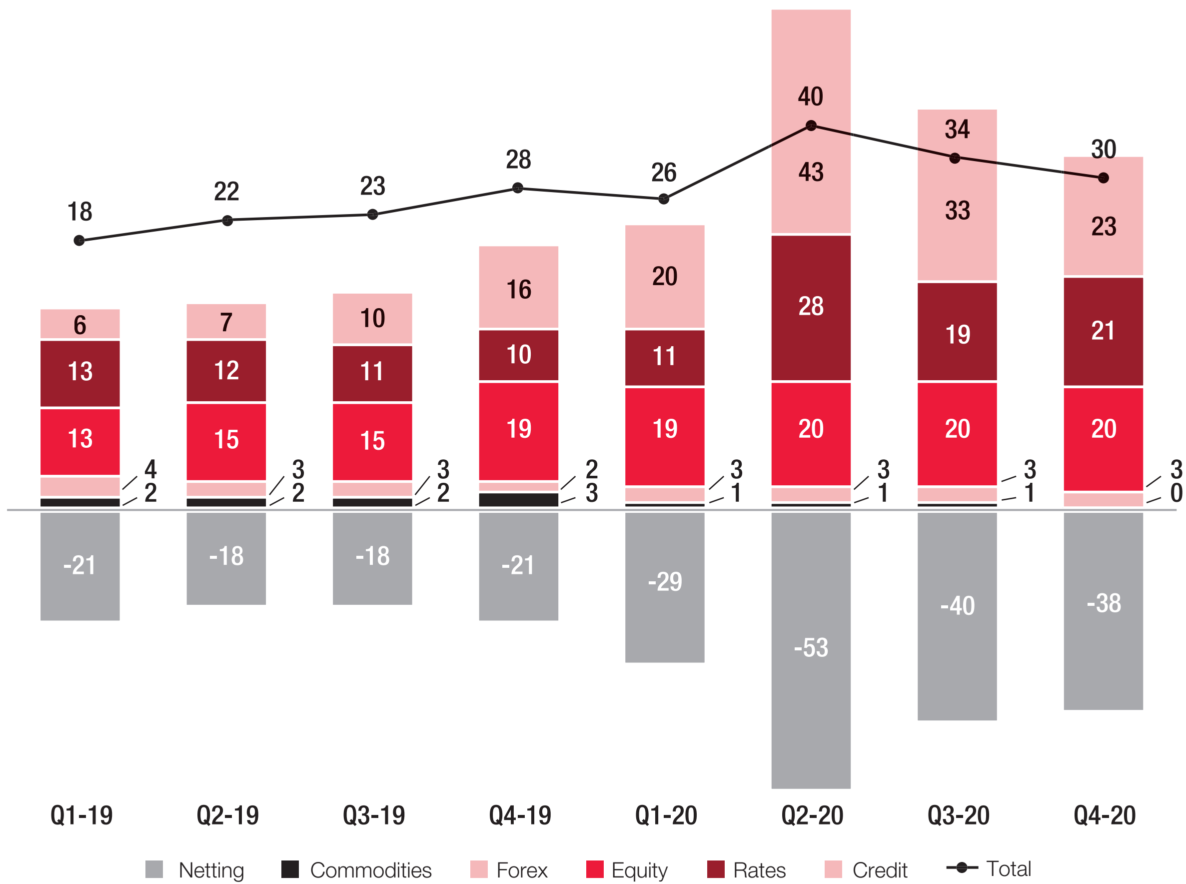
TABLE 91: REGULATORY TEN-DAY 99% VAR AND ONE-DAY 99% VAR

	31.12.2020		31.12.2019	
(In EURm)	VaR (10 days, 99%)[4]	VaR (1 day, 99%)[4]	VaR (10 days, 99%)[4]	VaR (1 day, 99%)[4]
Period start	93	29	49	16
Maximum value	188	60	113	36
Average value	103	33	71	23
Minimum value	35	11	40	13
Period end	67	21	85	27

(4) Over the scope for which capital requirements are assessed by internal model.

(1) Actual P&L.
(2) Daily profit or loss used for the VaR backtesting against actual P&L, as defined in the “99%Value-at-Risk (VaR)”.
(3) Daily profit or loss used for the VaR backtesting against hypothetical P&L, as defined in the “99%Value-at-Risk (VaR)”.

BREAKDOWN BY RISK FACTOR OF TRADING VAR (ONE-DAY, 99%) – CHANGES IN QUARTERLY AVERAGE OVER THE 2019-2020 PERIOD (IN EURM)



VaR was riskier in 2020 on average (EUR 33 million *vs* EUR 23 million in 2019) with contrasting trends:

- over the first two months of the year, VaR remained relatively stable at its 2019 year-end level;
- from the end of February and throughout the second quarter, VaR increased sharply, with a high level of variability due to the financial crisis triggered by the Covid-19 pandemic. This increase is mainly attributable to the interest rate and credit scope, the equity scope, and notably the exotic products activities, being the main factor of volatility;
- VaR then fell gradually to reach again pre-crisis values and dynamic at the end of the year.

STRESSED VAR (SVAR)

The Internal Stressed VaR Model (SVaR) was introduced at the end of 2011 and has been approved by the Regulator within the scope of the regulatory capital requirements on the same scope as the VaR.

The calculation method used for the 99% one-day SVaR is the same as as the one for the VaR. It consists in carrying out a historical simulation with one-day shocks and a 99% confidence interval. Contrary to VaR, which uses 260 scenarios for one-day fluctuations over a rolling one-year period, SVaR uses a fixed one-year historical window corresponding to a period of significant financial tension.

The method for determining the fixed historical stress window, which has been approved by the regulator[(1)], is based on a review of the historic shocks on the risk factors representative of the Societe Generale portfolio (related to equity, fixed income, foreign exchange, credit and commodity risks): historical shocks are aggregated to determine the period of highest stress for the entire portfolio. Each risk factor is assigned a weighting to account for the weight of each risk factor within its asset class and the weight of the asset class in the Group's VaR. The historical window used is reviewed annually. In 2020, this window was "September 2008-September 2009".

The ten-day SVaR used for the computation of the regulatory capital is obtained, as for VaR, by multiplying the one-day SVaR by the square root of ten.

The continuous backtesting performed on VaR model cannot be replicated to the SVaR model as, by definition, it is not sensitive to the current market conditions. However, as the VaR and the SVaR models rely on the same approach, they have the same advantages and limitations.

The relevance of the SVaR is regularly monitored and reviewed by the Risk Department in charge of the validation of internal models, as second line of defence. The independent review process ends with (i) review and approval Committees and (ii) an Audit Report detailing the scope of the review, the tests performed and their outcomes, the recommendations and the conclusion of the review. The model control mechanism gives rise to recurrent reporting to the appropriate authorities.

(1) A complementary method has been submitted to the regulator for approval in Q2 2018: the purpose is to ensure the relevance of the period obtained following the method based on the weighting of historical shocks by computing an approached VaR on the same selection of risk factors representative of the portfolio.

The SVaR increased on average in 2020 (EUR 50 million *vs* EUR 38 million in 2019). Its evolution over the year was marked by three main stages:

- over the first two months of the year, the SVaR remained at a low level, following on from 2019;
- in March, SVaR increased significantly, with a high level of variability due to the financial crisis triggered by the Covid-19 pandemic. This increase is mainly attributable to the equity scope initially, then mainly results from Fixed Income activities thereafter;
- the SVaR then fell gradually to reach again in July pre-crisis values and dynamic.

TABLE 92: REGULATORY TEN-DAY 99% SVAR AND ONE-DAY 99% SVAR

	31.12.2020		31.12.2019	
(In EURm)	Stressed VaR (10 days, 99%)[1]	Stressed VaR (1 day, 99%)[1]	Stressed VaR (10 days, 99%)[1]	Stressed VaR (1 day, 99%)[1]
Period start	105	33	108	34
Maximum value	343	109	213	67
Average value	158	50	119	38
Minimum value	73	23	49	15
Period end	131	41	112	35

(1) Over the scope for which capital requirements are assessed by internal model.

IRC AND CRM

At end-2011, Societe Generale received approval from the Regulator to expand its internal market risk modelling system by including IRC (Incremental Risk Charge) and CRM (Comprehensive Risk Measure), for the same scope as for VaR.

They estimate the capital charge on debt instruments that is related to rating migration and issuer default risks. These capital charges are incremental, meaning they are added to the charges calculated based on VaR and SVaR.

In terms of scope, in compliance with regulatory requirements:

- IRC is applied to debt instruments, other than securitisations and the credit correlation portfolio. In particular, this includes bonds, CDS and related derivatives;
- CRM exclusively covers the correlation portfolio, *i.e.* CDO tranches and First-to-Default products (FtD), as well as their hedging using CDS and indices.

Societe Generale estimates these capital charges using internal models[1]. These models determine the loss that would be incurred following especially adverse scenarios in terms of rating changes or issuer defaults for the year that follows the calculation date, without ageing the positions. IRC and CRM are calculated with a confidence interval of 99.9%: they represent the highest risk of loss obtained after eliminating 0.1% of the most unfavourable scenarios simulated.

The internal IRC model simulates rating transitions (including default) for each issuer in the portfolio, over a one-year horizon[2]. Issuers are classified into five categories: US-based companies, European companies, companies from other regions, financial institutions and sovereigns. The behaviours of the issuers in each category are correlated with each other through a systemic factor specific to each category. In addition, a correlation between these five systemic factors is integrated to the model. These correlations, along with the rating transition probabilities, are calibrated from historical data observed over the course of a full economic cycle. In case of change in an issuer's rating, the decline or improvement in its financial health is modeled by a shock in its credit spread: negative if the rating improves and positive in the opposite case. The price variation associated with each IRC scenario is determined after revaluation of positions *via* a sensitivity approach, using the delta, the gamma as well as the level of loss in the event of default (Jump to Default), calculated with the market recovery rate for each position.

The CRM model simulates issuer's rating transitions in the same way as the internal IRC model. In addition, the dissemination of the following risk factors is taken into account by the model:

- credit spreads;
- basis correlations;
- recovery rate excluding default (uncertainty about the value of this rate if the issuer has not defaulted);
- recovery rate in the event of default (uncertainty about the value of this rate in case of issuer default);
- First-to-Default valuation correlation (correlation of the times of default used for the valuation of the First-to-Default basket).

These dissemination models are calibrated from historical data, over a maximum period of ten years. The price variation associated with each CRM scenario is determined thanks to a full repricing of the positions. In addition, the capital charge computed with the CRM model cannot be less than a minimum of 8% of the capital charge determined with the standard method for securitisation positions.

(1) The same internal model is used for all portfolios for which an IRC calculation is required. The same is true for the portfolios on which a CRM calculation is performed. Note that the scope covered with internal models (IRC and CRM) is included in the VaR scope: only entities authorised for a VaR calculation via an internal model can use an internal model for IRC and CRM calculation.

(2) The use of a constant one-year liquidity horizon means that shocks that are applied to the positions to calculate IRC and CRM, are instantaneous one-year shocks. This hypothesis appears to be the most prudent choice in terms of models and capital, rather than shorter liquidity horizons.

The internal IRC and CRM models are subject to similar governance to that of other internal models meeting the Pillar 1 regulatory requirements. More specifically:

- an ongoing monitoring allows to follow the adequacy of IRC and CRM models and of their calibration. This monitoring is based at least on a yearly review of the modelling hypotheses. As these metrics are estimated *via* a 99.9% quantile over a one-year horizon, the low frequency of breaches means that a backtesting as the one performed on VaR model is not possible. In particular, this review includes:
  - a check of the adequacy of the structure of the rating transition matrices used for IRC and CRM models,
  - a backtesting of the probabilities of default used for these two models,
  - a check of the adequacy of the models for the dissemination of recovery rates, spread dissemination and dissemination of basic correlations used in the CRM calculation.

Regarding the checks on the accuracy of these metrics:

  - the IRC calculation being based on the sensitivities of each instrument – delta, gamma – as well as on the level of loss in the event of default (Jump to Default) calculated with the market recovery rate, the accuracy of this approach is checked against a full repricing every six months,
  - such a check on CRM is not necessary as its computation is performed following a full repricing;

- these metrics are compared to normative stress tests defined by the regulator. In particular, the EBA stress test and the risk appetite exercise are performed regularly on the IRC metric. These stress tests consist of applying unfavourable rating migrations to issuers, shocking credit spreads and shocking rating transition matrices. Other stress tests are also carried out on an *ad hoc* basis to justify the correlation hypotheses between issuers and those made on the rating transition matrix;
- a weekly analysis of these metrics is carried out by the production and certification team for market risk metrics;
- the methodology and its implementation have been initially validated by the French Prudential and resolution Supervisory (*Autorité de Contrôle Prudentiel et de Résolution* – ACPR). Thereafter, a review of the IRC and the CRM is regularly carried out by the Risk Department in charge of the validation of internal models as second line of defence. This independent review process ends with (i) review and approval Committees and (ii) an Audit Report detailing the scope of the review, the tests performed and their outcomes, the recommendations and the conclusion of the review. The model control mechanism gives rise to recurrent reporting to the appropriate authorities.

Moreover, regular operational checks are performed on the completeness of the scope's coverage as well as the quality of the data describing the positions.

TABLE 93: IRC (99.9%) AND CRM (99.9%)

(In EURm)	31.12.2020	31.12.2019
Incremental Risk Charge (99.9%)		
Period start	93	317
Maximum value	172	352
Average value	103	192
Minimum value	53	58
Period end	112	83
Comprehensive Risk Measure (99.9%)		
Period start	95	164
Maximum value	462	211
Average value	116	144
Minimum value	51	73
Period end	70	95

9.4 RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS

Allocation of exposures in the trading book

The on- and off-balance sheet items must be allocated to one of the two portfolios defined by prudential regulations: the banking book or the trading book.

The banking book is defined by elimination: all on- and off-balance sheet items not included in the trading book are included by default in the banking book.

The trading book consists of all positions in financial instruments and commodities held by an institution either for trading purposes or in order to hedge other positions in the trading book. The trading interest is documented as part of the traders' mandates.

The prudential classification of instruments and positions is governed as follows:

- the Finance Division's prudential regulation experts are responsible for translating the regulations into procedures, together with the Risk Division for procedures related to holding period and liquidity. They also analyse specific cases and exceptions. They share these procedures to the business lines;
- the business lines comply with these procedures. In particular, they document the trading interest of the positions taken by traders;
- the Finance and Risk Departments are in charge of the control framework.

The following controls are implemented in order to ensure that activities are managed in accordance with their prudential classification:

- new product process: any new product or activity is subject to an approval process that covers its prudential classification and regulatory capital treatment for transactions subject to validation;
- holding period: the Market Risk Department has designed a control framework for the holding period of certain instruments;
- liquidity: on a case-by-case basis or on demand, the Market Risk Department performs liquidity controls based on certain criteria (negotiability/transferability, bid/ask size, market volumes, etc.);
- strict process for any change in prudential classification, involving the business line and the Finance and Risk Divisions;
- internal audit: through its various periodic assignments, Internal Audit verifies or questions the consistency of the prudential classification with policies/procedures as well as the suitability of the prudential treatment in light of existing regulations.

Quantitative information

Almost ninety per cent of Societe Generale capital requirements related to market risk are determined using an internal model approach. The standard approach is mainly used for the positions presenting a foreign exchange risk, which are not part of the trading book, as well as for the Group's subsidiaries that do not have access to the core IT tools developed internally. The main entities concerned are some International Retail Banking and Financial Services entities such as Rosbank, SG Maroc, Crédit du Nord, BRD, SG Algérie, etc.

The increase in capital requirements for market risk is due to a diffuse and moderate increase in several components:

- VaR, which has almost returned to its pre Covid-19 level at the end of the year, after having increased significantly at the end of the first quarter and in the second quarter, increase mainly attributable to Fixed Income activities and to a lesser extent to the credit perimeter;
- IRC, which is increasing due to debt instruments on several categories of issuers (US companies and European governments);
- RWAs calculated under the standard approach, reflecting new securitisation positions, and a growth in the rate component.

TABLE 94: MARKET RISK CAPITAL REQUIREMENTS AND RWA BY RISK FACTOR

	Risk-weighted assets			Capital requirement		
(In EURm)	31.12.2020	31.12.2019	*Change*	31.12.2020	31.12.2019	*Change*
VaR	4,117	3,881	*236*	329	310	*19*
Stressed VaR	6,671	6,678	*(7)*	534	534	*(1)*
Incremental Risk Charge (IRC)	1,758	1,361	*398*	141	109	*32*
Correlation portfolio (CRM)	1,066	1,220	*(154)*	85	98	*(12)*
Total market risk assessed by internal model	**13,612**	**13,140**	***472***	**1,089**	**1,051**	***38***
Specific risk related to securitisation positions in the trading portfolio	534	277	*257*	43	22	*21*
Risk assessed for currency positions	219	865	*(646)*	17	69	*(52)*
Risks assessed for interest rates (excl. securitisation)	975	231	*745*	78	18	*60*
Risk assessed for ownership positions	-	-	-	-	-	-
Risk assessed for commodities	0	0	*0*	0	0	*0*
Total market risk assessed by standard approach	**1,728**	**1,373**	***355***	**138**	**110**	***28***
TOTAL	**15,340**	**14,513**	***827***	**1,227**	**1,161**	***66***

TABLE 95: MARKET RISK CAPITAL REQUIREMENTS AND RWA BY TYPE OF RISK

	Risk-weighted assets		Capital requirement	
	31.12.2020	31.12.2019	31.12.2020	31.12.2019
Risk assessed for currency positions	462	1,173	37	94
Risk assessed for credit (excl. deductions)	5,943	4,768	475	381
Risk assessed for commodities	43	792	3	63
Risk assessed for ownership positions	4,133	3,904	331	312
Risk assessed for interest rates	4,760	3,876	381	310
TOTAL	**15,340**	**14,513**	**1,227**	**1,161**

9.5 FINANCIAL INSTRUMENTS VALUATION

Management risk related to financial instrument valuation relies on the Global Market Division as first line of defence as well as two independent departments within the Finance Division and the Risk Division.

Governance

Governance on accounting valuation topics is enforced through two valuation Committees, both attended by representatives of the Global Markets Division, the Market Risk Department and the Finance Division:

- the Global Valuation Committee is convened whenever necessary, and at least every quarter, to discuss and approve financial instrument valuation methodologies (model refinements, reserve methodologies, etc.). This Committee, chaired by the Finance Division and organised by its valuation expert team (Valuation Group) has worldwide accountability with respect to the approval of the valuation policies concerning financial instruments on market activities;
- on a quarterly basis, the Global Valuation Review Committee, chaired by the Finance Division, reviews changes in reserves, valuation adjustment figures, and related accounting impacts. This analytical review is performed by the Valuation Group.

The topics related to Prudent Valuation are dealt with during methodological Committees and validation Committees, organised quarterly, and both chaired by the Finance Division and both attended by representatives of the Global Markets Division and the Market Risk Department.

Lastly, a Valuation Policy describes the valuation framework and its governance, specifying the breakdown of responsibilities between the stakeholders.

Valuation principles and associated controls

In terms of valuation, market products are marked to market, when such market prices exist; otherwise, they are valued using parameter-based models.

On the one hand, each model designed by the front office is subject to independent validation by the Market Risks Department as second line of defence that especially checks the theoretical aspects of the model (relevance of the hypotheses, analytical calculations, numerical methods), its performance (for instance in case of stressed conditions) and its implementation in systems. Following this review, the validation status of the model, its scope of use and the recommendations to be dealt with are formalised in a report.

On the other hand, the parameters used in the valuation models – whether or not they come from observable data – are subject to controls by the Market Risks Department and the Finance Division (Independent Pricing Verification).

If necessary, the valuations are supplemented by reserves or adjustments (for example, bid-ask spreads or liquidity) using calculation methods developed in consultation with the front office, which are subject to approval by the Market Risk Department and the Finance Division during the Global Valuation Committees.

Regulatory requirements

Furthermore, regarding the prudential component, Additional Valuation Adjustments (AVAs) are computed on fair value assets, in compliance with the Regulatory Technical Standards (RTS) published by the European Banking Authority (EBA), which lay out the requirements related to Prudent Valuation, in addition to the principles already specified in the CRD (Capital Requirements Directive). These Regulatory Technical Standards define the various uncertainties which have to be taken into account in the Prudent Valuation and set a target level of confidence to reach.

Within this framework, in order to take into account the various factors which could generate additional exit costs compared to the expected valuation (model risk, concentration risk, liquidation cost, uncertainty on market prices, etc.), Prudent Valuation Adjustments (PVAs) are computed for each exposure on the basis of methodologies designed by the Market Risk Department. The Additional Valuation Adjustments (AVAs) are defined as the difference between the Prudent Valuation obtained and the accounting fair value of the positions, in order to comply with the target level of confidence to reach (the confidence interval is equal to 90%). These amounts of AVA are deducted from the Common Equity Tier 1 capital.

9.6 ADDITIONAL QUANTITATIVE INFORMATION ON MARKET RISK

TABLE 96: MARKET RISK UNDER STANDARDISED APPROACH (MR1)

(In EURm)	31.12.2020 Risk-weighted assets	31.12.2019 Risk-weighted assets	31.12.2020 Capital requirement	31.12.2019 Capital requirement
Products	**1,194**	**1,096**	**96**	**88**
Interest rate risk (general and specific)	975	231	78	18
Equity risk (general and specific)	-	-	-	-
Foreign exchange risk	219	865	17	69
Commodity risk	0	0	0	0
Options	**534**	**277**	**43**	**22**
Simplified approach	-	-	-	-
Delta-plus method	-	-	-	-
Scenario approach	-	-	-	-
Securitisation (specific risk)	534	277	43	22
TOTAL	**1,728**	**1,373**	**138**	**110**

Outright products refer to positions in products that are not optional.

TABLE 97: MARKET RISK UNDER INTERNAL MODEL APPROACH (MR2-A)

	(In EURm)	31.12.2020 Risk-weighted assets	31.12.2019 Risk-weighted assets	31.12.2020 Capital requirement	31.12.2019 Capital requirement
1	**VaR (higher of values a and b)**	**4,117**	**3,881**	**329**	**310**
(a)	Previous day's VaR (Article 365(1) (VaRt-1))			79	85
(b)	Average of the daily VaR (Article 365(1)) on each of the preceding sixty business days (VaRavg) x multiplication factor ((mc) in accordance with Article 366)			329	310
2	**SVaR (higher of values a and b)**	**6,671**	**6,678**	**534**	**534**
(a)	Latest SVaR (Article 365(2) (SVaRt-1))			252	229
(b)	Average of the SVaR (Article 365(2) during the preceding sixty business days (SVaRavg) x multiplication factor (ms) (Article 366)			534	534
3	**Incremental risk charge - IRC (higher of values a and b)**	**1,758**	**1,361**	**141**	**109**
(a)	Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)			112	83
(b)	Average of the IRC number over the preceding 12 weeks			141	109
4	**Comprehensive Risk Measure – CRM (higher of values a, b and c)**	**1,066**	**1,220**	**85**	**98**
(a)	Most recent risk number for the correlation trading portfolio (article 377)			70	95
(b)	Average of the risk number for the correlation trading portfolio over the preceding 12-weeks			85	98
(c)	8% of the own funds requirement in SA on most recent risk number for the correlation trading portfolio (Article 338(4))			75	79
5	**TOTAL**	**13,612**	**13,140**	**1,089**	**1,051**

TABLE 98: INTERNAL MODEL VALUES IN TRADING PORTFOLIOS (MR3)

(In EURm)	31.12.2020	31.12.2019
VaR (10 days, 99%)[1]		
Period start	93	49
Maximum value	188	113
Average value	103	71
Minimum value	35	40
Period end	67	85
Stressed VaR (10 days, 99%)[1]		
Period start	105	108
Maximum value	343	213
Average value	158	119
Minimum value	73	49
Period end	131	112
Incremental Risk Charge (99.9%)		
Period start	93	317
Maximum value	172	352
Average value	103	192
Minimum value	53	58
Period end	112	83
Comprehensive Risk capital charge (99.9%)		
Period start	95	164
Maximum value	462	211
Average value	116	144
Minimum value	51	73
Period end	70	95
Floor (standardised measurement method)	75	79

(1) On the perimeter for which the capital requirements are assessed by internal model.

TABLE 99: QUARTERLY RWA FLOW STATEMENTS OF MARKET RISK EXPOSURES UNDER IMA (INTERNAL MODEL APPROACH) (MR2-B)

(In EURm)	VaR	SVaR	IRC	CRM	Other	Total RWA	Total capital requirements
RWA at end of previous reporting period (30.09.2020)	**4,694**	**7,342**	**1,218**	**1,315**	**-**	**14,570**	**1,166**
Regulatory adjustment	*3,373*	*3,917*	*38*	*-*	*-*	*7,328*	*586*
RWA at end of day previous quarter	*1,321*	*3,425*	*1,180*	*1,315*	*-*	*7,241*	*579*
Movement in risk levels	(335)	(1,845)	224	(435)	-	(2,390)	(191)
Model updates/changes	-	-	-	-	-	-	-
Methodology and policy	-	-	-	-	-	-	-
Acquisitions and disposals	-	-	-	-	-	-	-
Foreign exchange movements	(4)	(5)	-	-	-	(9)	(1)
Other			-	-	-	-	-
RWA at end of day quarter	*982*	*1,575*	*1,405*	*880*	*-*	*4,842*	*387*
Regulatory adjustment	*3,135*	*5,096*	*354*	*185*	*-*	*8,770*	*702*
RWA at end of reporting period (31.12.2020)	**4,117**	**6,671**	**1,758**	**1,066**	**-**	**13,612**	**1,089**

Effects are defined as follows:

- regulatory adjustment: difference between RWA used for the purpose of regulatory RWA calculation on the one hand and RWA of the last day or of the last week of the period on the other hand;
- movement in risk levels: changes due to position changes;
- model updates/changes: significant updates to the model to reflect recent experience (*e.g.* recalibration), as well as significant changes in model scope;
- methodology and policy: methodology changes to the calculations driven by regulatory policy changes;
- acquisitions and disposals: modifications due to acquisition or disposal of business/product lines or entities;
- foreign exchange movements: changes arising from foreign currency translation movements.

10

OPERATIONAL RISK

IN BRIEF

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

Operational risk RWA at end 2020

EUR 49.2bn

(Amount at end 2019: EUR 48.0bn)

Share of RWA calculated *via* the internal approach at end 2020

95%

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

Societe Generale's operational risk classification is divided into eight event categories:

- commercial litigation;
- disputes with authorities;
- errors in pricing or risk evaluation including model risk;
- execution errors;
- fraud and other criminal activities;
- rogue trading;
- loss of operating resources;
- IT system interruptions.

This classification is declined into 58 risk categories, cornerstone of the Group risk modelling, ensuring consistency throughout the system and enabling cross-business analyses throughout the Group (see section 10.2), particularly on the following risks:

- risks related to information and communication technologies and security (cybercrime, IT systems failures, etc.);
- risks related to outsourcing of services and business continuity;
- risks related to the launch of new products/services/activities for customers;
- non-compliance risk (including legal and tax risks): risk of court-ordered, administrative or disciplinary sanctions, or of material financial loss, due to failure to comply with the provisions governing the Group's activities;
- reputational risk: risk arising from a negative perception on the part of customers, counterparties, shareholders, investors or regulators that could negatively impact the Group's ability to maintain or engage in business relationships and to sustain access to sources of financing;
- misconduct risk: risk resulting from actions (or inactions) or behaviour of the Bank or its employees inconsistent with the Group's Code of Conduct, which may lead to adverse consequences for our stakeholders, or place the Bank's sustainability or reputation at risk.

The framework relating to the risks of non-compliance, reputation and inappropriate conduct is detailed in Chapter 13 "Compliance risk, litigation".

10.1 ORGANISATION OF OPERATIONAL RISK MANAGEMENT

The Group operational risk management framework, other than non-compliance risks detailed in Chapter 13 "Risk of non-compliance, Litigation", is structured around a two-level system with the following participants:

- a first line of defence in each core Business Units/Service Units, responsible for applying the framework and putting in place controls that ensure risks are identified, analysed, measured, monitored, managed, reported and contained with the limits set by the Group-defined risk appetite;
- a second line of defence: the Operational Risk Department within the Group's Risk Division.

In particular, the Operational Risk Department:

- conducts a critical examination of the BU/SUs management of operational risks (including fraud risk, risks related to information systems and information security, and risks related to business continuity and crisis management);
- sets regulations and procedures for operational risk systems and production of cross Group analyses;
- produces risk and oversight indicators for operational risk frameworks.

To cover the whole Group, the Operational Risk Department has a central team supported by regional hubs. The regional hubs report back to central, providing all information necessary for a consolidated overview of the Bank's risk profile that is holistic, prospective and valid for both internal oversight purposes and regulatory reporting.

The regional hubs are responsible for implementing the Operational Risk Division's briefs in accordance with the demands of their local regulators.

The Operational Risk Department communicates with the first line of defence through a network of operational risk correspondents in each Business Units/Service Units.

Concerning risks specifically linked to business continuity, crisis management and information security, the Operational Risk Department carries out the critical review of the management of these risks in connection with the Group Security Division. Specifically, regarding IT risks, the Operational Risk Department carries out the critical review of the management of these risks in connection with the Resources and Digital Transformation Department.

Second-level control

Level 2 control consists of verifying the definition and actual performance of level 1 controls, and in particular the examination of the results of level 1 controls in quantitative and qualitative aspects, in particular with regard to completion rate, anomaly levels, etc. This review also ensures the effectiveness and relevance of the deployment of controls by control needs and risk type and of corrective action plans.

According to the internal control system, the level 2 permanent control Risk teams carry out this mission on the operational risks covering the risks specific to the various businesses (including operational risks related to credit risks and market risks), as well as the risks associated with purchases, communication, real estate, human resources and information system.

Risk related to security of property and people

The Group Security Division (SEGL/DSG) is in charge of establishing a forward-looking overview of security, allowing to assess threats and identify weak signals, forewarning and protecting persons, Group's physical and intangible assets. Also coordinate the planning of actions to maintain the Bank's critical activities under all circumstances and assist crisis management if necessary. SEGL/DSG acts as first line of defence (LoD1 expertise) on issues of security.

To this end, the Division's main roles are as follows:

- defining a Group-level overview of security issues;
- identifying existing and future security threats and risks for the Group as well as its weaknesses to confront them;
- developing and disseminating Group mechanisms and policies to better protect its activities and ensure it is capable of withstanding security crises;
- implementing the Group's security oversight mechanism;
- organising the Group's crisis management system;
- coordinating relations with national, European and international security agencies in respect of security issues;
- developing and coordinating economic intelligence;
- assisting in combating fraud;
- strengthening the security culture within the Group (training, communication campaigns, etc.).

The management of all these risks is based on operational risk systems and the second line of defence is provided by the Risk Department.

Risks related to information security and information and communication technologies

Given the importance for the Group of its information system and the data it conveys and the continuous increase in the cybercriminal threat, the risks related to information and communication technologies and to security (ICT) are major for Societe Generale. Their supervision, integrated into the general operational risk management system, is steered as the first line of defence by a dedicated area of expertise (Information and Information Systems Security – ISS) and the second line of defence is provided by the Risk Department. They are subject to specific monitoring by the management bodies through sessions dedicated to Group governance (Risk Committee, CORISQ, CCCIG, DTCO) and a quarterly dashboard which presents the risk situation and action plans on the eight main themes of information and communication technologies risks.

The Department Security of the Group, housed within the General Secretariat, is responsible for protecting information. It ensures in particular:

- the publication of a new Information Security Group policy that encompasses both human and technical aspects;
- the redesign of the "Electronic Communications Charter" into the "Charter for the Protection of Information and IT Resources";
- the co-construction with RESG of the Data-Protection program, which aims to equip employees with a tool for classifying and protecting office documents;
- the distribution of a new e-learning on information security to all of the Group's employees in France and internationally.

The person in charge of risks related to information and communication technologies (ICT) and security of information systems is housed at the Corporate Resources and Digital Transformation Division. Under the functional authority of the Director of Group Security, he recommends the strategy to protect digital information and heads up the IT security department. The IT security framework is aligned with the market standards (NIST, ISO 27002), and implemented in each BU/SU.

Risk management associated with cybercrime is carried out through the tri-annual Information Systems Security (ISS) master plan.

In order to take into account the evolution of the threat, in particular that related to ransomware, and in line with the Group strategy, the ISS 2021-2023 master plan is structured, with a budget of EUR 650 million over the period 2021-2023, around two pillars that guide actions by 2023:

- protect the data of our customers and our ability to operate the banking services, by integrating the threats, the requirements of the regulators, and the need to support the Business Units and Service Units in their digital transformation and the evolution of uses that accompanies it. A risk-based approach allows us to concentrate our efforts on the most critical elements and data, in connection with the work of the Security Department cited above. We are preparing to manage a major cyber crisis by improving in particular our detection capacity, our ability to control our IT links with our partners and subsidiaries, and our ability to rebuild the information system;
- increase our operational efficiency by gaining overall consistency, and by increasing our protections and our ability to react. In particular by developing the management of the cyber security department, by optimizing our processes and our tools to be able to deploy new protections at constant cost. Finally, by working on the management of human resources in the filiere, in particular on the development of skills and networks of expertise.

At the operational level, the Group relies on a CERT (Computer Emergency Response Team) unit in charge of incident management, security watch and the fight against cybercrime. This team uses multiple sources of information and monitoring, both internal and external. Since 2018, this unit has also been strengthened by the establishment of an internal Red Team whose main tasks are to assess the effectiveness of the security systems deployed and to test the detection and reaction capabilities of the defence teams (Blue Teams) during an exercise simulating a real attack. The services of the Red Team enable the Group to gain a better understanding of the weaknesses in the security of the Societe Generale information system, to help in the implementation of global improvement strategies, and also to train cybersecurity defence teams. CERT works closely with the Security Operation Center (SOC), which is in charge of detecting security events and processing them.

A central team at the Resources and Digital Transformation Department is in charge, on IT processes, of the consistency of the implementation of operational risk management systems and their consolidation. The main missions of the team are:

- identifying and evaluating the major IT risks for the Group, including extreme risk scenarios (*e.g.* cyberattack, failure of a provider), to enable the Bank to improve its knowledge of its risks, be better prepared for extreme risk scenarios and better align their investments with their IT risks;
- produce the indicators that feed the IT risks monitoring dashboard, intended for management bodies and information systems Directors. They are reviewed regularly with the second line of defence in order to remain aligned with the IS and SSI strategy and their objectives;
- more generally, ensuring the quality and reliability of all devices addressing IT operational risks. Particular attention is paid to the permanent control system for its IT risks, which is based on the definition of normative IT and security controls and the support of the Group in the deployment of managerial supervision on this subject. As part of the "PCT" programme to transform permanent control, the normative controls were reviewed, ie around thirty controls on IS/SSI subjects. The IT Department monitors the deployment of these controls across the Group, the progress of which is aligned with the objectives set by the Group.

In terms of awareness, a multilingual online training module on information security is mandatory for all internal Group staff and for all service providers who use or access our information system. It was updated in early 2020 in order to incorporate changes to the new Group Information Security Policy. At the end of November 2020, 92% of Societe Generale group employees who had been notified had validated the training.

10.2 OPERATIONAL RISK MONITORING PROCESS

The Group's main frameworks for controlling operational risks are as follows:

- collection of internal losses and significant incidents and analysis of external losses;
- self-assessment of risks and controls;
- oversight of risk indicators;
- development of scenario analyses;
- framing new products;
- management of outsourced services;
- crisis management and business continuity;
- management of risks related to information and communication technologies.

Collection of internal loss and significant incident data

Internal losses have been compiled throughout the Group since 2003, in addition to significant incident data since 2019. The process:

- defines and implements the appropriate corrective actions;
- achieves a deeper understanding of risk areas;
- enhances awareness and vigilance with respect to operational risks in the Group.

Losses (or gains or near-misses) are reported from a minimum threshold of EUR 10,000 throughout the Group, except for global market activities, where the threshold is EUR 20,000.

Incidents without financial impact are also reported when they are deemed significant according to their impact, in particular on contractual commitments, reputation, day-to-day operations, risk appetite or the level of regulatory compliance of the Group.

Analysis of external losses

External losses correspond to the data on operational losses suffered by the banking and financial sector, provided by databases managed by external providers, as well as the data shared by the banking industry as part of consortiums.

These data are used to enhance the identification and assessment of the Group's exposure to operational risks.

Risk and control self-assessment

Under the Risk and Control Self-Assessment (RCSA), each manager assesses the exposure to operational risks to which each entity within the relevant scope is exposed through the activities in order to improve their management.

The method defined by the Group consists of taking a homogeneous approach to identifying and evaluating operational risks and frameworks to control these risks, in order to guarantee consistency of results at Group level. It is based notably on a repository of activities.

The objectives are as follows:

- identifying and assessing the major operational risks (in average amount and frequency of potential loss) to which each activity is exposed (the intrinsic risks, *i.e.* those inherent in the nature of an activity, while disregarding prevention and control systems). Where necessary, risk mapping established by the functions (*e.g.* Compliance, Information Systems Security, etc.) contributes to this assessment of intrinsic risks;
- assessing the quality of major risk prevention and mitigation measures;

- assessing the risk exposure of each activity that remains once the risk prevention and mitigation measures are taken into account (the "residual risk"), while disregarding insurance coverage;
- remedying any shortcomings in the prevention and control systems, by implementing corrective action plans and defining key risk indicators; if necessary, in the absence of an action plan, risk acceptance will be formally validated by the appropriate hierarchical level;
- adapting the risk insurance strategy, if necessary.

Key risk indicators

Key risk indicators (KRIs) supplement the overall operational risk management system by providing a dynamic view (warning system) of changes in business risk profiles.

Their follow-up provides managers of entities with a regular measure of improvements or deteriorations in the risk and the environment of prevention and control.

A cross analysis of Group-level KRIs and losses is presented to the Group's Executive Committee on a quarterly basis *via* a specific dashboard.

Analyses of scenarios

The analyses of scenarios serve two purposes: informing the Group of potential significant areas of risk and contributing to the calculation of the capital required to cover operational risks.

These analyses make it possible to build an expert opinion on a distribution of losses for each risk category and thus to measure the exposure to potential losses in scenarios of very severe severity, which can be included in the calculation of the prudential capital requirements.

In practice, various scenarios are reviewed by experts who gauge the severity and frequency of the potential impacts for the Group by factoring in internal and external loss data as well as the internal framework (controls and prevention systems) and the external environment (regulatory, business, etc.).

Governance is established in particular, to:

- allow the approval of the annual scenarios update programme by the Risk Committee (CORISQ);
- allow the approval of the scenarios by the senior management of the Business and Corporate Divisions, through the Internal Control Coordination Committees of the departments involved or through *ad hoc* meetings;
- conduct an overall review of the Group's risk hierarchy and of the suitability of the scenarios through CORISQ.

New product Committees

Each division submits their new product proposals to a New Product Committee (commercial products only).

The Committee, jointly coordinated by the Risk Division and the relevant businesses, is a decision-making body which decides the production and marketing conditions of new products to customers.

The Committee aims to ensure that, before any product launch, all types of induced risks (credit, market, liquidity and refinancing, country, operational, legal, accounting, tax, financial, information systems risks as well as the risks of compliance, reputation, protection of personal data and corporate social responsibility risks, etc.) have been identified, assessed and, if necessary, subjected to mitigation measures allowing the acceptance of residual risks.

The definition of "new product" extends from the creation of a new product or service to the development of an existing product or service as soon as this development is likely to generate different or higher risks. The development may be linked to matters such as a new regulatory environment, to marketing on a new scope or to a new type of clientele.

Outsourcing of services

Some banking services are outsourced outside the Group or within the Group (*e.g.* in our shared service centers). These two subcontracting channels are supervised in a manner adapted to the risks.

A framework with standards and a tool helps ensure that the operational risk linked to outsourcing is controlled, and that the conditions set by the Group's approval are respected.

It helps to map the Group's outsourcing with an identification of the activities and BU/SUs concerned, and to put outsourcing under control with knowledge of risks and with suitable supervision.

During the study phase, the businesses decide on the outsourcing of services within the framework of standards set by the Group. Outsourcing projects are led by a project manager and validated by the sponsor who accepts the residual risk level after a risk analysis based on expert opinions. This ensures the consistency of the assessments and the consistency of decisions across the Group.

The analysis includes, at a minimum, operational risks (including fraud, execution risk, etc.), legal, tax, non-compliance, reputation, supplier, human resources, social and environmental responsibility, business continuity risks, risks related to data quality, and risks related to information security and data protection.

Legal experts use the same definition of essential outsourcing of services as that defined in the Decree of 3 November 2014.

All outsourced services are then monitored at a frequency defined by their level of risk.

Services at Group level are subject to reinforced monitoring through very regular contractual monitoring. These services are identified using criteria such as the concept of "core business activity", financial impact and reputation risk. These services are validated by a dedicated Committee, chaired by the Operational Risk Department.

A closing phase is used to manage the outflow of services.

Crisis management and business continuity

The crisis management and business continuity systems aim to mitigate as far as possible the impacts of potential incidents on customers, staff, activities and infrastructure, thus protecting the Group's reputation, the image of its brands, and its financial resilience. These systems also satisfy regulatory requirements.

The approach used to implement and track the business continuity systems of each Group entity is based on a methodology that meets international standards.

10.3 OPERATIONAL RISK MEASUREMENT

Since 2004, Societe Generale has used the Advanced Measurement Approach (AMA) allowed by the Capital Requirements Directive to measure operational risk. This approach, implemented across the main Group entities, notably makes it possible to:

- identify the businesses that have the greatest risk exposures;
- identify the types of risk that have the greatest impact on the Group's risk profile and overall capital requirements;
- enhance the Group's management of operational risks.

Operational risk modelling

The statistical method used by the Group for operational risk modelling is based on the Loss Distribution Approach (LDA) for AMA internal model.

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, the internal and external environment, and 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 cybercriminality and the flooding of the river Seine.

Aside from the individual risks associated with each segment or cross-business scenario analysis, the model takes into account the diversification between the various types of risk and the core businesses, as well as the effect of insurance policies taken out by the Group. To comply with the regulations (Delegated Regulation (EU) 2018/959), the Group made two methodological changes in 2020: the modification of the copula used in the AMA model to take into account the dependencies between extreme events and not taking into account the opportunity costs in the AMA calculation.

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

For some Group entities, notably in retail banking activities abroad, the standard method is applied: the calculation of capital requirements is defined as the average over the last three years of a financial aggregate based on the Product Net Banking multiplied by factors defined by the regulator and corresponding to each category of activity. To make the calculation, all of the Group's business lines are broken down into the eight regulatory activities.

Societe Generale's total capital requirements for operational risks were EUR 3.9 billion at the end of 2020, representing EUR 49.0 billion in risk-weighted assets. This assessment includes the capital requirement of AMA and Standard perimeters.

Insurance cover in risk modelling

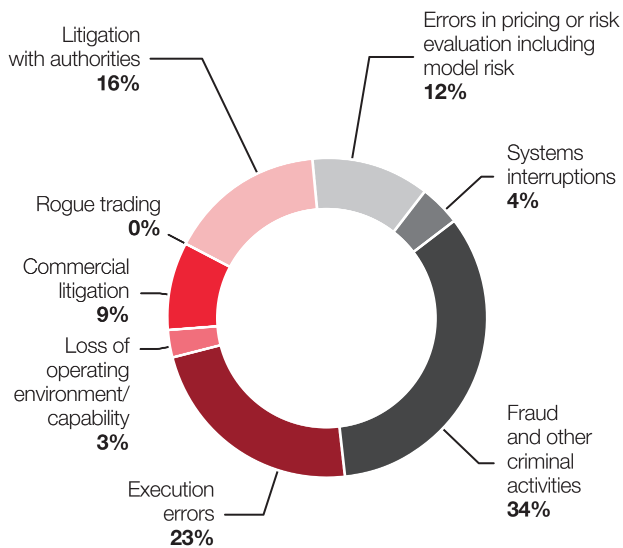
In accordance with regulations, Societe Generale incorporates risk cover provided by insurance policies when calculating regulatory capital requirements for operational risks, within the limit of 20% of said requirements. These insurance policies cover part of the Group's major risks, *i.e.* civil liability, fraud, fire and theft, as well as systems interruptions.

Risk reduction through insurance policies resulted in a 3.5% decrease in total capital requirements for operational risks.

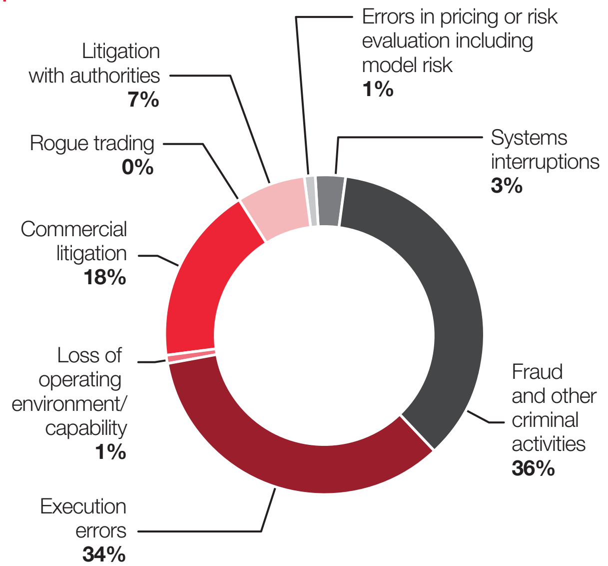
Quantitative data

The following charts break down operating losses by risk category for the 2016-2020 period.

OPERATIONAL RISK LOSSES: BREAKDOWN BY SOCIETE GENERALE RISK EVENT TYPE – AMOUNTS



OPERATIONAL RISK LOSSES: BREAKDOWN BY SOCIETE GENERALE RISK EVENT TYPE – NUMBER OF EVENTS



Over the past five years, Societe Generale's operational risks were concentrated on average on sixtypes, accounting for 97% of the Group's total operating losses:

- fraud and other criminal activities represented 34% of the amount of operating losses over the period. They are mainly composed of external frauds on financing files (falsified financial statements by the client, theft or misappropriation of collateral/guarantees, etc.), fraud on manual means of payment (cash, transfer and cheque) and supplier fraud on financed equipment;
- execution errors represented 23% of total operational losses, thereby constituting the second leading cause of loss for the Group. The amount of losses in this category is trending upwards over the last two years with values above the average;
- litigation with authorities, the third largest category, represented 16% of the Group's operational losses over the period. The amount of losses in this category has fallen very significantly over the last two years following the settlement of the Group's main disputes in 2018;
- pricing or risk assessment errors, including model risk, represent 12% of the total amount of losses. The main cases concern the pricing and ALM models;
- commercial disputes represented 9% of total Group operating losses. The trend is down for this category over the period considered;
- information systems failures represent 4% of the total amount of the Group's operational losses. The trend is increasing for this category over the period considered.

The other categories of Group operational risk (activities not authorised on the markets, system interruptions, loss of operating environment/capability) were still relatively insignificant, representing barely 3% of the Group's losses on average over the 2016 to 2020 period.

10.4 RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS

Societe Generale's capital requirements for operational risk are mainly calculated using the Advanced Measurement Approach (AMA) *via* its internal model (95% in 2020).

The amount of RWA on the AMA scope increased in 2020 (EUR +1.4 billion, *i.e.* +3.2%). This rise is linked with the application of some regulatory evolutions (Delegated Regulation (EU) No. 2018/959 having a final application date as of Q3 2020), with notably an upward impact on RWA triggered by a change of statistical modelling, somewhat alleviated by the exclusion of some types of losses from several scenarios for the calculation of operational risk capital requirements.

The following table breaks down the Group's risk-weighted assets and the corresponding capital requirements as at 31 December 2020.

TABLE 100: RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS FOR OPERATIONAL RISK

	31.12.2020				31.12.2019			
(In EURm)	RWA under standardised approach	RWA under Advanced Measurement Approach (AMA)	Total RWA	Capital requirements	RWA under standardised approach	RWA under Advanced Measurement Approach (AMA)	Total RWA	Capital requirements
Global Banking and Investor Solutions	185	31,696	31,881	2,550	189	32,007	32,196	2,576
Corporate Center	260	7,046	7,306	584	364	3,141	3,505	280
International Retail Banking and Financial Services	1,681	3,922	5,603	448	1,884	5,029	6,913	553
French Retail Banking	124	4,275	4,398	352	33	5,313	5,346	428
TOTAL	**2,250**	**46,938**	**49,188**	**3,935**	**2,470**	**45,491**	**47,961**	**3,837**

10.5 OPERATIONAL RISK INSURANCE

General policy

Since 1993, Societe Generale has implemented a global policy of hedging Group operational risks through insurance.

This consists in searching the market for the most extensive cover available for the risks incurred and enabling all entities to benefit from such cover wherever possible. Policies are taken out with leading insurers. Where required by local legislation, local policies are taken out, which are then reinsured by insurers that are part of the global program.

In addition, special insurance policies may be taken out by entities that perform specific activities.

A Group internal reinsurance company intervenes in several policies in order to pool high-frequency, low-level risks between entities. This approach contributes to the improvement of the Group's knowledge and management of its risks.

Description of main general risk coverage

Buildings and their contents, including IT equipment, are insured at their replacement value. The guarantee covering acts of terrorism abroad has been renewed.

Liability other than professional liability (*i.e.* relating to operations, Chief Executive Officers and Directors, etc.) are covered. The amounts insured vary from country to country, according to operating requirements.

Description of main risks arising from operations

Insurance is only one of the measures used to offset the consequences of the risks inherent in the Group's activity. It complements the Group's risk management policy.

THEFT/FRAUD

These risks are included in the "Banker's Blanket Bond" policy that insures all the Group's financial activities around the world.

Internal fraud (committed by an employee or by a third party acting with the aid of an employee) and external fraud (committed by a third party acting alone), with the intent to obtain illicit personal gain or to harm the Group, are covered.

PROFESSIONAL LIABILITY

The consequences of any legal on staff or managers in the Group's professional activities are insured under a global policy.

CYBER ATTACKS

A cyber risk insurance policy has been taken out amid an environment not specific to the banking sector which is seeing a rapid development of new forms of crime mainly involving data theft or the compromise or destruction of computer systems.

11

STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

IN BRIEF

Structural interest rate and exchange rate risks correspond to the risk of losses of interest margin or value of the fixed rate structural position arising from variations in interest or exchange rates. Structural interest rate and exchange rate risks arise from commercial activities and from transactions entered into by the Corporate Centre. This section describes the monitoring of structural risks and provides information on structural interest rate and exchange rate risks.

Overall sensitivity of the Group’s value to structural interest rate risk in the event of a parallel shift in the yield curves of +10 bps at end 2020

(in % of regulatory capital)

< 1%

Group net interest margin sensitivity over three years, in the event of a parallel shift in the yield curves of +10 bps in 2020

(in % of the net banking income)

< 2%

Maximum sensitivity of the Group’s Common Equity Tier 1 ratio per currency to a 10% change by currency

(in basis points)

< 0.8 bp

Overall sensitivity all currencies combined

(in basis points)

+3.6 bps

Structural exposure to interest rate and exchange rate risks results from commercial transactions, their associated hedging transactions and Corporate Centre transactions.

The interest rate and exchange rate risks linked to trading book activities are excluded from the structural risk measurement scope as they belong to the category of market risks. Structural and market exposures constitute the Group's total interest rate and exchange rate exposure.

The general principle is to reduce structural interest rate and exchange rate risks to the greatest possible extent within the consolidated entities. Within the entities, commercial and corporate center operations must therefore be matched in terms of interest rates and exchange rates as much as possible. At consolidated level, a structural foreign exchange position is maintained in order to minimise the sensitivity of the Group's Common Equity Tier 1 (CET1) ratio to exchange fluctuations.

11.1 ORGANISATION OF THE MANAGEMENT OF STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

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

The Group Finance Committee, a General Management Body

The purpose of the Group Finance Committee is to:

- validate and ensure the adequacy of the system for monitoring, managing and supervising structural risks;
- review changes in the Group's structural risks through consolidated reporting;
- review and validate the measures proposed by the Group's Finance Department.

The ALM Department, within the Group's Finance Department

The ALM (Asset and Liability Management) Department is responsible for:

- defining the structural risk policies for the Group and formalising risk appetite to structural risks;
- defining the steering indicators and overall stress test scenarios of the different types of structural risks and setting the main limits for the business divisions and the entities and Business Units (BU) et Service Units (SU);
- analysing the Group's structural risk exposure and defining hedging strategies;
- monitoring the regulatory environment concerning structural risk;
- defining the ALM principles for the Group;
- defining the normative environment of the structural risk metrics, modelling and framing methods;
- defining the models used by the Group's entities regarding structural risks;
- identifying, consolidating and reporting on Group structural risks;
- monitoring compliance with structural risk limits.

The ALM Risk Control Department within the Risk division

The second-level supervision of the ALM models used within the Group and of associated frameworks is provided by a dedicated service within the Risk Department. Accordingly, the department:

- validates the methodological principles, feeding parameters and back tests of ALM models;
- requests and analyses proposals from the Group Finance Division regarding the risk indicators definition, stress test scenarios and structural risk frameworks;
- ensures at the second level that the entities' frameworks and BU/SU and Group frameworks are respected, and conducts a regular review in coordination with the first-level control teams.

Finally, the Risk Department organises and chairs the Group model validation Committee and the Group ALM norms validation Committee.

The entities and BU/SU are responsible for ALM risk management

Each entity and each BU/SU carries out first-level controls on structural risks and is responsible for regularly assessing risks incurred. It drafts the risk report and develops and implements hedging options. Each entity and each BU/SU is required to comply with the Group's standards and to adhere to the limits assigned to it.

As such, the entities and the BUs/SUs apply the standards defined at Group level and develop the models, with the support of the Finance Department's central modelling teams.

An ALM manager reporting to the Finance Department in each entity is responsible for monitoring these risks (level 1 control). He is responsible for reporting ALM risks to the Group Finance Department. All entities have an ALM Committee which is tasked with implementing validated models, managing exposure to interest rate and exchange rate risks and implementing hedging programmes in accordance with the principles set out by the Group and the limits validated by the Finance Committee and the BU/SU ALM Committees.

11.2 STRUCTURAL INTEREST RATE RISK

Structural interest rate risk is generated by commercial transactions and their hedging, as well as the management operations specific to each of the consolidated entities.

This interest rate risk arises mainly from residual fixed-rate positions with future maturities.

The Group’s objective

The objective of managing structural interest rate risk is to reduce the degree of exposure of each Group entity as much as possible.

To this end, the Board of Directors, the Finance Committee and the ALM Committees set sensitivity limits (in terms of value and income) for the Group, the BU/SUs and the entities, respectively.

Measuring and monitoring structural interest rate risk

Societe Generale uses several indicators to measure the Group's overall interest rate risk.

The three most important indicators are:

- the sensitivity of the net present value (NPV) to the risk of interest rate mismatch. It is measured as the sensitivity of the net present value of the static balance sheet to a change in interest rates. This measure is calculated for all currencies to which the Group is exposed;
- the sensitivity of the interest margin to changes in interest rates in various interest rate scenarios. It takes into account the sensitivity generated by future commercial production over a three-year period and is calculated on a dynamic basis;
- the sensitivity of NPV to basis risk (risk associated with decorrelation between different variable rate indices).

Limits on these indicators apply to the Group, the BUs/SUs and the various entities.

Assets and liabilities are analysed without prior allocation of resources to uses. Maturities of outstanding amounts are determined by taking into account the contractual characteristics of the transactions, adjusted for the results of customer behaviour modelling (in particular for demand deposits, savings and early loan repayments), as well as a certain number of disposal agreements, in particular on equity items.

Where possible, hedging transactions are documented from an accounting view point: this can be carried out either as micro-hedging (individual hedging of commercial transactions) or as macro-hedging under the IAS 39 carve-out arrangement (global backing of portfolios of similar commercial transactions within a treasury department; macro-hedging concerns essentially French retail network entities).

Macro-hedging derivatives are essentially interest rate swaps in order to maintain networks’ net asset value and result sensitivity within limit frameworks, considering hypotheses applied. For macro-hedging documentation, the hedged item is an identified portion of a portfolio of commercial client or interbank operations. Conditions to respect in order to document hedging relationships are reminded in Note 3.2 to the consolidated financial statements.

Macro-hedging derivatives are allocated to separate portfolios according to whether they are used to hedge fixed-rate assets or liabilities in the accounting books. The hedging instrument portfolios allocated to liability elements are net fixed-rate receiver/variable-rate payer whereas the hedging instrument portfolios allocated to asset elements are net fixed-rate payer/variable-rate receiver.

The non-over hedging tests and hedged items non-disappearing tests make the link between the balance sheet available assets or liabilities outstanding amounts and the amount of assets and liabilities outstanding amounts designated as hedged. The prospective non-over hedging test is satisfied when the net outstanding amount of the swaps is lower for each maturity band and on each measurement date than the determinated outstanding amount of items eligibles to fair value hedge. The estimated outstanding amounts may be defined as the outstanding amount resulting from ALM projections. The non-over hedging *a posteriori* test is performed in two stages. The first stage is the same as the *a priori* test but on the outstanding amount eligible for a fair value hedge on closing date, new production excluded. The second stage is called the non-disappearance of the hedged item test and consists of verifying that the hedgeable position is always at least as significant as the maximum position that had initially been hedged.

The effectiveness of the hedge is then determined using the dollar off-set method. The sources of ineffectiveness result from the last fixing of the variable leg of the hedging swaps, the bi-curve valorisation of the collateralised hedging instruments, possible mismatches in the cash flows payment dates and counterparty risk on hedging instruments valorisation.

The Group’s sensitivity to changes in interest rates as at 31 December 2020 is EUR 345 million (for an instantaneous and parallel increase in interest rates of 0.1%).

TABLE 101: SENSITIVITY OF THE GROUP'S VALUE TO A +10 BPS INTEREST RATE VARIATION

(In EURm)	Total
Amount of sensitivity (31.12. 2020)	**345**
Amount of sensitivity (31.12.2019)	(54)

The Group analyses the sensitivity of the net interest margin to changes in market interest rates through stress tests on the Group's net interest margin under constant balance sheet and under forward balance sheet assumptions.

The measurement of the sensitivity of the net interest margin to a three-year horizon in different configurations of the yield curve is used by the Group to monitor the interest rate risk on a perimeter of significant entities.

The balance sheet in a dynamic approach evolves according to the amortisation of the stock and the renewals of operations on the basis of the outstanding amounts booked at the closing date.

The sensitivity of the Group's net interest margin over the next three full years is low. In the event of a parallel rise in the yield curve of +10 bps, it is positive and represents less than 2% of net banking income.

The sensitivity of the net interest margin is mainly due to the impact on:

- customer deposits: generally low or non-interest-bearing, with customer rates only partially impacted by interest rate changes, their margin is mainly the result of the replacement rate;
- new credit loan production.

The sensitivity of the margin on the stock of customer transactions results from the renewal of matured tranches of deposit replacements and the residual sensitivity of the balance sheet to interest rate changes.

French Retail Banking's activities in France and abroad are favourably exposed by a rise in interest rates over the first three years enabling them to replace their deposits at higher rates, with the margin on loans in stock remaining stable. However, this increase in margin is partially offset by higher refinancing costs.

Retail Banking activities are unfavourably exposed to the decrease in rates as their deposits are then replaced at lower rates and the margin on loans in stock decreases due to early repayments. This decline in margin was partially offset by lower refinancing costs.

Calculations are based on the aggregate estimates as at 31 December of consolidated entities of the Group.

TABLE 102: SENSITIVITY OF THE GROUP'S INTEREST MARGIN

(In EURm)	31.12.2020	31.12.2019
Parallel increase in interest rates of 10 bp		
Year 1	62	9
Year 2	107	48
Year 3	184	115
Parallel decrease in interest rates of 10 bp		
Year 1	(74)	(15)
Year 2	(124)	(56)
Year 3	(201)	(122)

11.3 STRUCTURAL EXCHANGE RATE RISK

Structural exchange rate risk, understood as resulting from all transactions that do not belong to the Trading Book, results from:

- exposures related to net investments abroad in foreign currencies, *i.e.* in subsidiaries and branches. FX positions generated by an imperfect hedge are valued through other comprehensive income;
- net results related to activities made by entities in currencies that are not their reporting currency.

The Group's policy is to make the CET1 ratio insensitive to fluctuations in exchange rates against the euro.

As such:

- Group entities are asked to individually hedge the results related to activities in currencies other than their reporting currency;
- the exposures related to net investments in foreign currencies and the associated net results are partially hedged at central level. A position in each foreign currency generating RWA is intentionally maintained open by the Finance department at the Group CET1 ratio targeted level. Hedges are realised using cash lending and borrowing, forward and swap instruments in the subsidiaries' currencies and accounted for as net investment hedges.

For each currency, the difference between actual and target exposure is governed by limits validated by the Finance Committee and the Board of Directors (see Note 3.2.2 *Hedging derivatives* of Chapter 6 of the 2021 Universal Registration Document).

TABLE 103: SENSITIVITY OF THE GROUP'S COMMON EQUITY TIER 1 RATIO TO A 10% CHANGE IN THE CURRENCY (IN BASIS POINTS)

	Impact of a 10% currency depreciation on the Common Equity Tier 1 ratio		Impact of a 10% currency appreciation on the Common Equity Tier 1 ratio	
Currency	31.12.2020	31.12.2019	31.12.2020	31.12.2019
GNF	(0.1)	(0.1)	0.1	0.1
JPY	0.1	(0.2)	(0.1)	0.2
KRW	0.2	(0.1)	(0.2)	0.1
MAD	0.2	0.2	(0.2)	(0.2)
XPF	0.3	0.0	(0.3)	(0.0)
RUB	0.3	0.0	(0.3)	0.0
GBP	0.7	(0.1)	(0.7)	0.1
XAF	0.7	0.4	(0.7)	(0.4)
USD	0.8	(0.2)	(0.8)	0.2
Others	0.5	(0.9)	(0.5)	0.9

12

LIQUIDITY RISK

IN BRIEF

Liquidity risk is defined as the Group's inability to meet its financial obligations at a reasonable cost. Funding risk is defined as the risk of the Group being unable to finance the development of its activities in line with its commercial objectives and at a competitive cost.

Liquidity reserve at end 2020

EUR 243bn

(Amount at end 2019: EUR 190bn)

Liquidity risk is defined as the Group's inability to meet its financial obligations at a reasonable cost. Funding risk is defined as the risk of the Group being unable to finance the development of its activities in line with its commercial objectives and at a competitive cost.

12.1 OBJECTIVES AND GUIDING PRINCIPLES

The liquidity and funding management set up at Societe Generale aims at ensuring that the Group can (i) fulfil its payment obligations at any moment in time, during normal course of business or under lasting financial stress conditions (management of liquidity risks); (ii) raise funding resources in a sustainable manner, at a competitive cost compared to peers (management of funding risks). Doing so, the liquidity and funding management set up ensures that both regulatory requirements and the risk appetite set by the Group are met.

To achieve these objectives, Societe Generale has adopted the following guiding principles:

- mutualising resources, optimising costs and ensuring consistent risk management by centralising liquidity and funding management at the Corporate centre level, mainly in the name of the mother company (Societe Generale SA). For that purpose, Business Units have tight constraints in terms of the transformation position they can run, hence need to match their assets and liabilities by transacting with the Corporate centre, along a Funds Transfer Pricing mechanism. Assets or liabilities which do not have a set contractual maturity (*e.g.* sight deposits) have their maturity assessed along quantitative models or conventions proposed by the Finance Division and by the Business Units and validated by the Risk Division (see below);
- planning for funding resources in consideration of both the business development objectives and the risk appetite set by the Board of Directors (see section 2 below);
- ensuring that funding risks are mitigated through a proper diversification of funding resources in terms of currencies, investor pools, maturity buckets, liability format (*e.g.* benchmark bond issuance, with a split along various seniority levels, issuance in the form of structured notes, issuance in the form of unsecured and secured notes. In order to optimise funding costs, the majority of bond issuance is made in the name of the mother company. However, a degree of diversification is sought by leveraging the capacity of some subsidiaries to raise funds in a way which complements the mother company's funding, *i.e.* raising funds from local investors in local currencies;
- ensuring that Societe Generale keeps liquid reserves in sufficient amount to comply with the survival horizon under stress set by the Board of Directors. Liquid reserves are in the form of cash held at central banks and highly liquid securities, split between the Banking Book (under the direct ownership of the Group Treasury Department) or the Trading Book (mainly within the Global Markets division, under a permanent control of the Group Treasury Department);
- ensuring Societe Generale has readily available remediation options to face potential stress situations, through contingency plans aimed at detecting any stress signals at an early stage and defining in advance the crisis management setup.

12.2 OPERATIONAL IMPLEMENTATION

The key operational steps of liquidity and funding management are as follows:

- risk identification is a process which is set out and documented by the Risk Division, in charge of establishing a mapping of liquidity risks. This process is conducted yearly with each Business Unit and within the Group Treasury Department, aimed at screening all material risks and checking their proper measurement and capturing the control framework. In addition, a Reverse Stress Testing process exists, which aims at identifying and quantifying the risk drivers which may weigh most on the liquidity profile under assumptions even more severe than used in the regular stress test metrics;
- definition, implementation and periodic review of liquidity models and conventions used to assess the duration of assets and liabilities without a set contractual maturity and to assess the liquidity profile under stress. Liquidity models are managed along the overall Model Risk Management governance, also applicable to other risk factors (market, credit, operational), controlled by the Group Risk division;
- yearly definition of the risk appetite for liquidity and funding risks, whereby the Board of Directors sets targets for key metrics, and related alert thresholds. Such risk appetite targets are then cascaded down per Business Units. The risk appetite is framed along the following metrics:
  - key regulatory indicators (LCR and NSFR),
  - the footprint of the Group in Short-Term Wholesale funding markets,
  - the survival horizon under an adverse stress scenario, combining a severe market and systemic shock and an idiosyncratic shock. In addition to the main adverse scenario, Societe Generale also checks its survival horizon under an extreme stress scenario. For both scenarios, the idiosyncratic shock is characterised by one of its main consequences, which would be an immediate 3-notch downgrade of Societe Generale's long-term rating. In such adverse or extreme scenarios, the liquidity position of the Group is assessed over time, taking into account the negative impacts of the scenarios, such as deposit outflows, drawing by clients of the

committed facilities provided by Societe Generale, increase in margin calls related to derivatives portfolios, etc. The survival horizon is the moment in time when the net liquidity position under such assumptions becomes negative,

- the overall transformation position of the Group (proper matching of assets and liabilities, in tenors up to 5 years),
- the amount of free collaterals providing an immediate access to central bank funding, in case of an emergency (only collaterals which do not contribute to the numerator of the LCR are considered, *i.e.* non-HQLA collaterals);

- yearly budget process aimed at ensuring that the forward financial trajectory under baseline and stressed scenarios will fulfil the risk appetite targets set by the Board of Directors and at calibrating accordingly the funding plan. The budget's baseline scenario reflects the central assumptions for the macro-economic environment and the business strategy of the Group, while the stressed scenario is factoring both an adverse macro-economic environment and idiosyncratic issues;
- the funding plan comprises both the long-term funding programme, which frames the issuance of plain vanilla bonds and structured notes, and the plan to raise short-term funding resources in money markets;
- maintenance by the Group Treasury Department of a Funds Transfer Pricing framework, aimed at making funding grids available at any time for Business Units to transact with the Corporate center to upstream their liquidity surplus or borrow cash so that they fund their activities within their transformation position limits;
- production and broadcasting of periodic liquidity reports, at various frequencies (daily indicators, weekly indicators, monthly indicators), leveraging in most part on the central data repository, operated by a dedicated central production team. The net liquidity position under the combined (idiosyncratic and market/systemic) stress scenario is reassessed on a weekly basis and can be analysed along multiple axes (per product, Business Unit, currency, legal entity). Each key metric (LCR, NSFR, transformation positions, net liquidity position under combined stress) is reviewed formally on a monthly basis by the Group Finance and Risk divisions. Forecasts are made and revised weekly by the Strategic and Financial Steering Department and reviewed during a Weekly Liquidity Committee chaired by the Head of Group Treasury. This Weekly Liquidity Committee gives tactical instructions to Business Units, with the objective to adjust in permanence the liquidity and funding risk profile, within the financial targets and taking into account business requirements and market conditions;
- preparation of a Contingency Funding Plan, which is updated yearly, and provides for: (i) a set of early warning indicators (*e.g.* market parameters or internal indicators); (ii) the operating model and governance to be adopted in case of an activation of a crisis management mode (and the interplay with other regimes, in particular Recovery management); (iii) the main remediation actions to be considered as part of the crisis management.

These various operational steps form overall the ILAAP (Internal Liquidity Adequacy Assessment Process) framework of Societe Generale.

Every year, Societe Generale produces for its supervisor, the ECB, a self-assessment of the liquidity risk framework in which key liquidity and funding risks are identified, quantified and analysed with both a backward and a multi-year forward-looking perspective. The adequacy self-assessment also describes qualitatively the risk management setup (methods, processes, resources), supplemented by an assessment of the adequacy of the Group's liquidity.

12.3 GOVERNANCE

Based on the guiding principles and on the operational setup described above, the following bodies are involved in the control of liquidity and funding risks:

- the Board of Directors, which:
  - sets yearly the level of liquidity risk tolerance as part of the Group's risk appetite, based on a set of key metrics, which includes both internal and regulatory metrics, in particular the period of time during which the Group can operate under stressed conditions ("survival horizon"),
  - approves budget targets, including targets related to scarce resources such as liquidity usage and funding (definition of the funding plan),
  - reviews at least quarterly the Group's liquidity and funding situation: key liquidity metrics, including the pace of execution of the funding plan and the related cost of funds;
- General Management, which:
  - allocates liquidity and funding targets to the various Business Units and the Group Treasury entity, upon proposal from the Group Finance division,
  - defines and implements the liquidity and funding risk strategy, based on inputs from the Finance and Risk Divisions and the Business Units. In particular, the General Management chairs the Finance Committee, held every 6 weeks and attended by representatives from the Finance and Risk Divisions and Business Units, which is responsible for monitoring structural risks and managing scarce resources:
    - validation and monitoring of the set of limits for structural risks, including liquidity risk,
    - monitoring of budget targets and decisions in case of a deviation from the budget,
    - definition of principles and methods related to liquidity risk management (*e.g.* definition of stress scenarios),
    - assessment of any regulatory changes and their impacts;
- the Group Finance Division, which is responsible for the liquidity and funding risks as First Line of Defence, interacting closely with Business Units. Within the Group Finance Division, there are three main departments involved respectively in the preparation and implementation of decisions taken by the abovementioned bodies:
  - the Strategic and Financial Steering Department is responsible for framing and overseeing management of the Group's scarce resources, including liquidity, within the Group's risk appetite and budget targets,
  - the Group Treasury Department is in charge of all aspects of the operational management of liquidity and funding across the Group, including managing the liquidity position, executing the funding plan, supervising and coordinating treasury functions, providing operational expertise in target setting, managing the

liquidity reserves and the collateral used in funding transactions, managing the corporate centre,

- the Asset and Liability Management Department is in charge of modelling and controlling structural risks, including liquidity risk alongside interest rate and foreign exchange risks in the Banking Book;

- also sitting with the Group Finance Division, the Metrics Production Department runs the management information system regarding liquidity and funding risks across the Group. For liquidity metrics, the Group relies on a centralised system architecture, with all Business Units feeding a central data repository from which all metrics are produced, either regulatory metrics (*e.g.* the LCR or the NSFR) or metrics used for internal steering (*e.g.* stress test indicators);
- the ALM Risk Department, which leads the risk identification process, designs the structure and the calibration of the liquidity and funding risks control framework and monitors compliance with related thresholds and limits. It also validates liquidity models and conventions.

12.4 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, collateralise or credit enhance any transaction from which it cannot be freely withdrawn.

Analysis of the balance sheet structure

Total Group encumbrance amounts to 31% over 2020, measured according to the EBA definition[1]. Securities encumbrance is 71%, while loan encumbrance is 14%.

The majority of the Group's encumbered assets (around 77%) is in the form of securities as a result of the relative size of capital market activities, mainly through repos, reverse repos and collateral swaps.

Securities encumbrance is concentrated in SGPM and its branches, where Group market activities are located.

The main sources of encumbrance are repo operations and debt securities issued. Encumbrance on assets in US dollars stems mainly from debt securities.

The level of encumbered loans varies among Group entities mainly due to their respective business models, funding strategies and the type of underlying loans, as well as to the law governing them. A few points are noteworthy:

- at SGPM level, the loan encumbrance rate amounts to close to 34%[2] at 2020 year-end, stemming mainly from housing loans. Encumbered loans are affected as collateral for the ECB’s TLTRO operations as well as long-term refinancing mechanisms which are broadly used by banks for covered bonds (SG SFH, SG SCF and CRH), securitisations or specific mechanisms;
- at subsidiary level, the loan encumbrance rate stands at 20%[2] overall, with discrepancies between entities due to different funding strategies. The highest levels of secured funding correspond to entities which contribute to the pooling scheme (see below) or having implemented external funding programmes through securitisations such as BDK (*Bank Deutsches Kraftfahrzeuggewerbe*) and ALD, or other forms of secured funding. Besides, some subsidiaries (Crédit du Nord) have participated directly in TLTRO operations, which in turn impacted their loan encumbrance rate.

As far as the loan encumbrance is concerned, there is a pooling scheme in which Crédit du Nord, Boursorama and to a lesser extent BFCOI (Réunion) bring a share of their housing loans portfolio to the Group.

Regarding major long-term secured funding mechanisms, over-collateralisation on covered bond vehicles was 129% on SG SCF and 114% on SG SFH as at 31 December 2020.

As far as SG SFH is concerned, underlying assets are mortgage loans guaranteed by Crédit Logement.

Regarding SG SCF, assets consist of exposures on counterparties from the public sector.

The unencumbered “Other assets” (excluding loans) include all derivatives and options products (interest rate swaps, cross currency swaps, currency options, warrants, futures, forward contracts…) as well as some assets that cannot be encumbered in the normal course of business. These assets include goodwill, fixed assets, deferred tax, adjustment accounts, sundry debtors and other assets.

(1) Median values on quarterly data.
(2) According to a methodology consisting of encumbering the least liquid eligible assets (encumbered loans/total loans) first.

TABLE 104: ENCUMBERED AND UNENCUMBERED ASSETS (AE-ASS)

	31.12.2020[1]							
	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
(In EURm)		of which: EHQLA & HQLA		of which: EHQLA & HQLA		of which: EHQLA & HQLA		of which: EHQLA & HQLA
Assets of the reporting institution	**193,360**	**58,192**			**1,119,295**	**196,192**		
Equity instruments	30,726	23,708			35,624	11,631		
Debt securities	36,404	32,617	36,404	32,617	65,884	45,498	65,884	45,498
of which: covered bonds	*85*	*21*	*85*	*21*	*221*	*206*	*221*	*206*
of which: asset-backed securities	*131*	*107*	*131*	*107*	*1,737*	*54*	*1,737*	*54*
of which: issued by general governments	*32,196*	*31,113*	*32,196*	*31,113*	*39,877*	*39,877*	*39,877*	*39,877*
of which: issued by financial corporations	*2,101*	*721*	*2,101*	*721*	*14,848*	*4,339*	*14,848*	*4,339*
of which: issued by non-financial corporations	*1,939*	*558*	*1,939*	*558*	*5,927*	*422*	*5,927*	*422*
Other asset	124,074	838			1,018,810	142,845		
of which: Loans on demand	*5,078*	-	-	-	*172,646*	*138,391*	-	-
of which: Loans and advances other than loans on demand	*117,365*	*838*	-	-	*550,028*	*1,554*	-	-
of which: other	*1,431*	-	-	-	*296,136*	*2,251*	-	-

(1) Table's figures are calculated as medians of the four quarters across 2020.

TABLE 105: COLLATERAL RECEIVED (AE-COL)

	31.12.2020[1]			
	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
(In EURm)		of which: EHQLA & HQLA[1]		of which: EHQLA & HQLA[1]
Collateral received by the reporting institution	**350,885**	**307,935**	**72,179**	**57,800**
Loans on demand	-	-	-	-
Equity instruments	60,252	40,614	12,003	7,246
Debt securities	291,988	268,785	57,003	48,598
of which: covered bonds	*2,318*	*1,213*	*7,286*	*6,878*
of which: asset-backed securities	*7,019*	*4,049*	*3,033*	*216*
of which: issued by general governments	*267,274*	*262,019*	*43,078*	*40,929*
of which: issued by financial corporations	*15,655*	*2,448*	*12,420*	*7,074*
of which: issued by non-financial corporations	*10,168*	*5,254*	*2,359*	*542*
Loans and advances other than loans on demand	-	-	-	-
Other collateral received	-	-	-	-
Own debt securities issued other than own covered bonds or asset-backed securities	-	-	**796**	-
Own covered bonds and asset-backed securities issued and not yet pledged			**10,259**	-
TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	**557,598**	**373,512**	**-**	**-**

(1) Table's figures are calculated as medians of the four quarters across 2020.

TABLE 106: SOURCES OF ENCUMBRANCE (AE-SOU)

	31.12.2020[1]	
(In EURm)	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	**361,249**	**380,460**

(1) Table's figures are calculated as medians of the four quarters across 2020.

12.5 LIQUIDITY RESERVE

The Group's liquidity reserve encompasses cash at central banks and assets that can be used to cover liquidity outflows under a stress scenario. The reserve assets are available, *i.e.* not used in guarantee or as collateral on any transaction. They are included in the reserve after applying a haircut to reflect their expected valuation under stress. The Group's liquidity reserve contains assets that can be freely transferred within the Group or used to cover subsidiaries' liquidity outflows in the event of a crisis: non-transferable excess cash (according to the regulatory ratio definition) in subsidiaries is therefore not included in the Group's liquidity reserve.

The liquidity reserve includes:

- central bank deposits, excluding mandatory reserves;
- High-Quality Liquid Assets (HQLAs), which are securities that can be quickly monetised on the market *via* sale or repurchase transactions; these include government bonds, corporate bonds and equities listed on major indices (after haircuts). These HQLAs meet the eligibility criteria for the LCR, according to the most recent standards known and published by regulators. The haircuts applied to HQLA securities are in line with those indicated in the most recent known texts on determining the numerator of the LCR;
- non-HQLA Group assets that are central bank-eligible, including receivables as well as covered bonds and securitisations of Group receivables held by the Group.

The composition of the liquidity reserve is regularly reviewed by a special committee comprising the Finance Division, the Risk Division and the Management of the Global Banking and Investor Solutions core business, and is adjusted by authorisation of the Finance Committee.

TABLE 107: LIQUIDITY RESERVE

(In EURbn)	31.12.2020	31.12.2019
Central bank deposits (excluding mandatory reserves)	154	88
HQLA securities available and transferable on the market (after haircut)	82	81
Other available central bank-eligible assets (after haircut)	7	21
TOTAL	**243**	**190**

12.6 REGULATORY RATIOS

The Basel Committee recommends the international implementation of two standard ratios with harmonised 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 which compares funding needs with stable resources over a one-year period.

The transposition of Basel 3 into European Union law under CRD4 and CRR1 was published on 27 June 2013. The French transposition was published in the French Official Journal (*Journal officiel*) on 5 November 2014.

The LCR regulation issued on 10 October 2014 has since been updated by a Delegated Act which entered into force on 30 April 2020. The corresponding minimum requirement was set at 100% from 1 January 2018.

The NSFR requirement is included in the CRR2 as publisehd in June 2019. It will enter into force in June 2021. The required level will stand at 100%.

Societe Generale is actively continuing its work on transposing the European prudential legislation (or the Basel text when the European transposition has not been finalised yet) and on translating it into management standards within the Group.

The Group manages its liquidity risk through the LCR, the NSFR and liquidity gaps, under stress and under normal conditions of activity, and accumulated (all currencies combined), and this, by making sure at any time that the liquidity is transferable across the main currencies.

Since the implementation of the European regulatory LCR requirement in October 2015, Societe Generale's LCR has consistently stood at over 100%. The LCR was 149% at end-2020 (*vs.* 119% at end-2019).

The LCR regulatory requirement must be respected by the Group in all currencies but it is also reported in the major currency in US dollars. The Group assessment performed on potential currency mismatch between liquid assets and net outflows shows that the LCR surplus in euros is sufficient to cover the gap in US dollars.

TABLE 108: LIQUIDITY COVERAGE RATIO (EU-LIQ1)

The liquidity coverage ratio is calculated as the simple average of month-end observations over the twelve months preceding the end of each quarter.

Prudential Group *(In EURm)*	Total unweighted value (in average)				Total weighted value (in average)			
Quarter ending on	**31.03.2020**	**30.06.2020**	**30.09.2020**	**31.12.2020**	**31.03.2020**	**30.06.2020**	**30.09.2020**	**31.12.2020**
High-quality liquid assets								
Total high-quality liquid assets (HQLA)					164,784	175,241	188,059	204,815
Cash - Outflows								
Retail deposits and deposits from small business customers, of which:	198,003	200,970	204,245	208,820	15,489	15,667	15,847	16,129
Stable deposits	*120,881*	*120,133*	*119,612*	*119,952*	*6,044*	*6,007*	*5,981*	*5,998*
Less stable deposits	*77,105*	*78,688*	*80,479*	*82,818*	*9,428*	*9,642*	*9,849*	*10,113*
Unsecured wholesale funding	234,525	242,678	248,555	256,322	117,545	123,704	128,679	135,539
Operational deposits (all counterparties) and deposits in networks of cooperative banks	*59,993*	*61,116*	*60,802*	*60,660*	*14,525*	*14,797*	*14,726*	*14,698*
Non-operational deposits (all counterparties)	*160,853*	*167,458*	*173,333*	*178,756*	*89,340*	*94,803*	*99,533*	*103,935*
Unsecured debt	*13,680*	*14,104*	*14,419*	*16,906*	*13,680*	*14,104*	*14,419*	*16,906*
Secured wholesale funding					82,594	82,852	79,785	78,303
Additional requirements	179,266	178,570	177,343	177,538	69,639	67,554	64,331	62,022
Outflows related to derivative exposures and other collateral requirements	*46,482*	*44,609*	*41,123*	*38,531*	*44,161*	*42,181*	*38,822*	*36,470*
Material outflows due to deterioration of own credit quality	*5,941*	*5,770*	*5,669*	*5,463*	*5,941*	*5,770*	*5,669*	*5,463*
Credit and liquidity facilities	*126,843*	*128,191*	*130,551*	*133,544*	*19,537*	*19,603*	*19,840*	*20,089*
Other contractual funding obligations	70,561	68,082	64,255	63,480	70,561	68,082	64,255	63,480
Other contingent funding obligations	44,368	43,087	43,366	44,151	457	279	511	624
TOTAL CASH OUTFLOWS					**356,284**	**358,139**	**353,408**	**356,097**
Cash - inflows								
Secured lending (eg reverse repos)	294,353	291,814	279,908	278,135	95,468	96,437	93,274	90,906
Inflows from fully performing exposures	39,045	39,993	40,037	39,816	31,783	32,606	32,864	32,857
Other cash inflows	108,698	108,145	106,363	106,166	106,981	106,207	104,246	103,956
(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					-	-	-	-
(Excess inflows from a related specialised credit institution)					-	-	-	-
TOTAL CASH INFLOWS	**442,096**	**439,953**	**426,308**	**424,117**	**234,232**	**235,250**	**230,385**	**227,719**
Fully exempt Inflows	-	-	-	-	-	-	-	-
Inflows subject to 90% cap	-	-	-	-	-	-	-	-
Inflows subject to 75% cap	***366,071***	***363,284***	***350,846***	***348,996***	***234,232***	***235,250***	***230,385***	***227,719***
LIQUIDITY BUFFER					**164,784**	**175,241**	**188,059**	**204,815**
TOTAL NET CASH OUTFLOWS					**122,052**	**122,889**	**123,023**	**128,378**
LIQUIDITY COVERAGE RATIO (%)					**135%**	**143%**	**153%**	**160%**

12.7 BALANCE SHEET SCHEDULE

The main lines of the Group's financial liabilities and assets are presented in Note 3.13 to the consolidated financial statements.

TABLE 109: BALANCE SHEET SCHEDULE

FINANCIAL LIABILITIES

	31.12.2020					
(In EURm)	Note to the consolidated financial statements	0-3 m	3 m-1 yr	1-5 yrs	> 5 yrs	Total
Due to central banks		1,489	-	-	-	**1,489**
Financial liabilities at fair value through profit or loss, excluding derivatives		164,209	17,529	20,520	28,813	**231,071**
Due to banks	Note 3.6	57,383	9,140	67,830	1,218	**135,571**
Customer deposits	Note 3.6	422,319	14,489	13,328	5,923	**456,059**
Securitised debt payables	Note 3.6	36,665	34,317	44,998	22,977	**138,957**
Subordinated debt	Note 3.9	7	2	6,029	9,394	**15,432**

NB: The scheduling assumptions for these liabilities are presented in Note 3.13 to the consolidated financial statements. In particular, the data are shown without provisional interest and excluding derivatives.

	31.12.2019					
(In EURm)	Note to the consolidated financial statements	0-3 m	3 m-1 yr	1-5 yrs	> 5 yrs	Total
Due to central banks		4,097	-	-	-	**4,097**
Financial liabilities at fair value through profit or loss, excluding derivatives		155,032	17,815	23,584	29,578	**226,009**
Due to banksknow	Note 3.6	69,155	20,306	17,268	1,200	**107,929**
Customer deposits	Note 3.6	372,574	20,385	16,318	9,335	**418,612**
Securitised debt payables	Note 3.6	28,143	24,947	56,099	15,979	**125,168**
Subordinated debt	Note 3.9	5	2	2,746	11,712	**14,465**

NB: The scheduling assumptions for these liabilities are presented in Note 3.13 to the consolidated financial statements. In particular, the data are shown without provisional interest and excluding derivatives.

FINANCIAL ASSETS

(In EURm)	31.12.2020					
	Note to the consolidated financial statements	**0-3 m**	**3 m-1 yr**	**1-5 yrs**	**> 5 yrs**	**Total**
Cash, due from central banks		164,724	900	1,611	944	**168,179**
Financial assets at fair value through profit or loss, excluding derivatives	Note 3.4	240,288	9,371	-	-	**249,659**
Financial assets at fair value through other comprehensive income	Note 3.4	51,090	708	-	262	**52,060**
Securities at amortised cost	Note 3.5	13,941	146	1,337	211	**15,635**
Due from banks at amortised cost	Note 3.5	46,790	1,664	4,071	855	**53,380**
Customer loans at amortised cost	Note 3.5	70,518	75,862	163,365	109,820	**419,565**
Lease financing agreements*	Note 3.5	2,582	6,036	16,167	4,411	**29,196**

* *Amounts are featured net of impairments.*

(In EURm)	31.12.2019					
	Note to the consolidated financial statements	**0-3 m**	**3 m-1 yr**	**1-5 yrs**	**> 5 yrs**	**Total**
Cash, due from central banks		98,967	735	1,609	1,000	**102,311**
Financial assets at fair value through profit or loss, excluding derivatives	Note 3.4	242,879	7,011	-	-	**249,890**
Financial assets at fair value through other comprehensive income	Note 3.4	51,730	1,282	-	244	**53,256**
Securities at amortised cost	Note 3.5	11,012	200	973	304	**12,489**
Due from banks at amortised cost	Note 3.5	47,260	1,957	6,257	892	**56,366**
Customer loans at amortised cost	Note 3.5	87,877	58,318	162,795	111,234	**420,224**
Lease financing agreements*	Note 3.5	2,487	6,050	16,727	4,756	**30,020**

* *Amounts are featured net of impairments.*

Due to the nature of its activities, Societe Generale holds derivative products and securities whose residual contractual maturities are not representative of its activities or risks.

By convention, the following residual maturities were used for the classification of financial assets:

1. assets measured at fair value through profit or loss, excluding derivatives (customer-related trading assets):
   - positions measured using prices quoted on active markets (L1 accounting classification): maturity of less than 3 months,
   - positions measured using observable data other than quoted prices (L2 accountBing classification): maturity of less than 3 months,
   - positions measured mainly using unobservable market data (L3): maturity of 3 months to 1 year;
2. financial assets at fair value through other comprehensive income:
   - available-for-sale assets measured using prices quoted on active markets: maturity of less than 3 months,
   - bonds measured using observable data other than quoted prices (L2): maturity of 3 months to 1 year,
   - finally, other securities (shares held long-term in particular): maturity of more than 5 years.

As regards the other lines of the balance sheet, other assets and liabilities and their associated conventions can be broken down as follows:

OTHER LIABILITIES

	31.12.2020						
(In EURm)	**Note to the consolidated financial statements**	**Not scheduled**	**0-3 m**	**3 m-1 yr**	**1-5 yrs**	**> 5 yrs**	**Total**
Tax liabilities	Note 6.3	-	-	815	-	408	**1,223**
Revaluation difference on portfolios hedged against interest rate risk		7,696	-	-	-	-	**7,696**
Other liabilities	Note 4.4	-	76,148	2,218	4,549	2,022	**84,937**
Non-current liabilities held for sale		-	-	-	-	-	-
Insurance contracts related liabilities	Note 4.3	-	16,593	9,475	38,011	82,047	**146,126**
Provisions	Note 8.3	4,775	-	-	-	-	**4,775**
Shareholders' equity		66,979	-	-	-	-	**66,979**

	31.12.2019						
(In EURm)	**Note to the consolidated financial statements**	**Not scheduled**	**0-3 m**	**3 m-1 yr**	**1-5 yrs**	**> 5 yrs**	**Total**
Tax liabilities	Note 6.3	-	-	939	-	470	**1,409**
Revaluation difference on portfolios hedged against interest rate risk		6,671	-	-	-	-	**6,671**
Other liabilities	Note 4.4	-	85,062	-	-	-	**85,062**
Non-current liabilities held for sale	Note 2.5	-	-	1,333	-	-	**1,333**
Insurance contracts related liabilities	Note 4.3	-	19,392	9,291	37,018	78,558	**144,259**
Provisions	Note 8.3	4,387	-	-	-	-	**4,387**
Shareholders' equity		68,570	-	-	-	-	**68,570**

OTHER ASSETS

(In EURm)	31.12.2020						
	Note to the consolidated financial statements	**Not scheduled**	**0-3 m**	**3 m-1 yr**	**1-5 yrs**	**> 5 yrs**	**Total**
Revaluation differences on portfolios hedged against interest rate risk		378	-	-	-	-	**378**
Other assets	Note 4.4	-	67,341	-	-	-	**67,341**
Tax assets	Note 6	5,001	-	-	-	-	**5,001**
Investments accounted for using the equity method		-	-	-	-	100	**100**
Tangible and intangible fixed assets	Note 8.4	-	-	-	-	30,088	**30,088**
Goodwill	Note 2.2	-	-	-	-	4,044	**4,044**
Non-current assets held for sale		-	1	1	2	2	**6**
Investments of insurance companies	Note 4.3	-	44,087	7,569	34,097	81,101	**166,854**

(In EURm)	31.12.2019						
	Note to the consolidated financial statements	**Not scheduled**	**0-3 m**	**3 m-1 yr**	**1-5 yrs**	**> 5 yrs**	**Total**
Revaluation differences on portfolios hedged against interest rate risk		401	-	-	-	-	**401**
Other assets	Note 4.4	-	68,045	-	-	-	**68,045**
Tax assets	Note 6	5,779	-	-	-	-	**5,779**
Investments accounted for using the equity method		-	-	-	-	112	**112**
Tangible and intangible fixed assets	Note 8.4	-	-	-	-	30,652	**30,652**
Goodwill	Note 2.2	-	-	-	-	4,627	**4,627**
Non-current assets held for sale	Note 2.5	-	6	4,501	-	-	**4,507**
Investments of insurance companies	Note 4.3	-	39,514	8,289	33,193	83,942	**164,938**

1. Revaluation differences on portfolios hedged against interest rate risk are not scheduled, as they comprise transactions backed by the portfolios in question. Similarly, the schedule of tax assets whose schedule would result in the early disclosure of income flows is not made public.
2. Other assets and other liabilities (guarantee deposits and settlement accounts, miscellaneous receivables) are considered as current assets and liabilities.
3. The notional maturities of commitments in derivative instruments are presented in Note 3.13 to the consolidated financial statements.
4. Investments in subsidiaries and affiliates accounted for by the equity method and Tangible and intangible fixed assets have a maturity of more than 5 years.
5. Provisions and shareholders' equity are not scheduled.

13

COMPLIANCE RISK, LITIGATION

IN BRIEF

Compliance means acting in accordance with the obligations applicable to the Group's activities, ranging from laws and regulations to professional, ethical and internal standards and principles.

By ensuring that these provisions are observed, the Group works to protect its employees, customers and all stakeholders. Compliance with rules is the responsibility of all Group employees, who must demonstrate compliance and integrity in their daily tasks.

The Group relies on a recently restructured, clear organisation to ensure the compliance system is both respected and consistent.

Acting in compliance means understanding and observing the external and internal rules that govern our activities. These rules aim to ensure a transparent and balanced relationship between the Bank and all of its stakeholders. Compliance is the cornerstone of trust between the Bank, its customers, its supervisors and its staff.

Compliance with rules is the responsibility of all Group employees, who must demonstrate compliance and integrity on a daily basis. The rules must be clearly expressed, and staff are informed and/or trained to understand them properly.

The compliance risk prevention system is based on shared responsibility between the operational entities and the Group Compliance Division:

- the operational entities (BU/SUs) must incorporate into their daily activities compliance with laws and regulations, the rules of professional best practice, and the Group's internal rules;
- the Compliance Division manages the Group's compliance risk prevention system. It ensures the system's consistency and efficiency, while also developing appropriate relationships with bank supervisors and regulators. This independent division reports directly to General Management.

To support the businesses and supervise the system, the Compliance Division is organised into:

- dedicated teams in each business line, liaising with the businesses on all their compliance issues and responsible for most of the deal flow, except for the most sensitive transactions;
- central teams dedicated to oversight, the definition of standards and controls, and key cross-business activities such as training and digital transformation.

The Compliance Division is organised into nine main compliance risks, which are grouped into two major categories:

- financial security, which includes Know Your Customer (KYC) processes, the observance of international sanctions and embargo rules, and antimoney laundering and counter-terrorism financing rules;
- regulatory risks, which cover customer protection, market integrity, compliance with international tax regulations, antibribery and corruption, ethics and conduct, corporate social responsibility and personal data protection.

Financial Security			Regulatory Risk					
KYC	**AML**	**Sanctions & Embargoes**	**Customer protection**	**Market integrity**	**Tax transparency**	**Anti-corruption, Conduct and Ethics**	**Corporate Social Responsibility**	**Data**
Know Your Customer	Anti-money laundering and counter-terrorism financing		MiFID II/MIFIR, PRIIPs, etc.	EMIR/DFA, Volker, FBL, MAD/MAR, benchmarks, etc.	FATCA, CRS, QI, etc.	ABC, Sapin II, etc.	CSR, ESG, etc.	GDPR, Archiving, etc.

13.1 COMPLIANCE

Financial security

KNOW YOUR CUSTOMER (KYC)

In 2018, the Group launched a programme to revamp its KYC functions in order to boost their operational efficiency (*via* the simplification of standards, greater pooling of resources, optimisation of tools and processes) and to improve the customer experience. Placed under the responsibility of the Compliance Division, this four-year programme is closely and regularly monitored at the highest Bank level. Significant progress has already been made in terms of providing equipment to handle KYC analysis and with respect to process industrialisation.

ANTI-MONEY LAUNDERING AND COUNTER-TERRORISM FINANCING (AML/CTF)

The Group has implemented all the measures linked to the Fourth Directive on antimoney laundering and counter-terrorism financing, as well as European Regulation 2015/847 on the quality of payment information. The transposition of the 5th European Directive (officially applicable in French law *via* a decree dated 12 February 2020) into internal standards is advancing through recent industry-wide consultations and quarterly updates to the Societe Generale Code. It will be completed in early 2021.

The system for detecting suspicious or unusual transactions continued to be strengthened in 2020 with the roll-out of the most sophisticated surveillance tools, the optimisation of the scenarios used, and the use of new technologies.

FINANCIAL EMBARGOES AND SANCTIONS

In 2020, the international environment was impacted by the reinforcement of United States sanctions on China, with greater complexity in terms of implementation that may generate substantial operational risks for financial institutions. More broadly, Societe Generale Group has confirmed its position to abstain from any trading activity with Iran and to maintain transactions with Russia within a strict framework.

The Group continued to strengthen its Embargoes/Sanctions system under the established remedial programme following agreements with the French and US authorities, in particular in terms of screening third parties and transactions, training employees and industrializing all processes involved in controlling this risk.

Regulatory risk

CUSTOMER PROTECTION

Customer protection is a major challenge for the Societe Generale Group, which is committed to respecting and protecting the interests of its customers.

The system addressing the obligations introduced by European customer protection regulations (MIF2 and the Insurance Distribution Directive or DDA) has now been established both in terms of product governance and consulting, and with respect to compliance with information requirements. As part of the COVID crisis, the networks have temporarily adapted the marketing terms (information and remote sales) by developing telephonic consulting procedures.

In an environment marked by the health and social crisis, bank fee capping systems have been operational since February 2019 and continue to be strengthened.

In this context, significant measures are being taken to improve the Group's system by:

- strengthening internal rules relating to key aspects of customer protection (marketing rules, customer claims, conflict of interest, product governance, protection of customer assets, remuneration and qualification of employees);
- specific training and increased staff awareness; the importance the Group places on this issue is largely addressed in the Group's Code of Conduct;
- adapting as a matter of necessity existing tools to new regulatory requirements.

Claims and mediation

The processing of a claim is a commercial act that impacts customer satisfaction. Accordingly, it has received much coverage in the Code of Conduct.

The "Customer claim processing" Group instruction incorporates the recommendations of the national supervisor (the French Prudential Supervisory and Resolution Authority) and the regulatory requirements (MIF2, DDA and DSP - Payment Services Directive) relative to the strengthening at European level of customer protection measures. The bank's businesses have an *ad hoc* governance, an organisation, human resources and applications, formalised procedures, and quantitative and qualitative monitoring indicators. Mediation services also form part of the internal procedure.

Conflicts of interest

The Group has a clear normative framework in place to prevent and manage conflicts of interest. This framework specifies the principles and mechanisms that have been implemented. The risk mappings, registers and declarations of the most exposed employees were strengthened in 2020 and are now more thorough to comply with obligations to identify situations of potential conflicts of interest. The system now covers three categories of potential conflicts of interest: those that may arise between the Group and its customers, or between the Group's customers; those occurring between the Group and its employees (particularly in relation to activities involving an employee's personal interest and their professional obligations); and those occurring between the Group and its suppliers.

Product governance

Product governance obligations have been broadened to include compliance with marketing and customer information regulations. As it is obliged to identify the target market from the product design stage and to verify that the criteria match customer situations, the Societe Generale Group performs both systematic product reviews upstream of the marketing stage and communication between product originators and distributors to track the products during their life cycle.

Vulnerable customers

Societe Generale has established practices and usages to comply with legislation vis-à-vis vulnerable customers, in particular customers benefiting from the specific offer for financially vulnerable customers. To contribute to the national effort to boost the purchasing power of French citizens in challenging financial circumstances, the Group has added to its practices by introducing additional measures in February 2019, notably: i) freezing bank fees; ii) capping bank intervention fees at EUR 25 for vulnerable clients; iii) organizing follow-up and support suited to the situation of customers experiencing difficulties in the wake of recent events. These measures are closely monitored.

MARKET INTEGRITY

The main regulatory risks concerning market integrity involve the following:

- benchmarks (regulation on Benchmarks/BMR);
- market abuse and ethical employee behaviour (MAR);
- derivatives activities (Dodd-Frank and EMIR regulations);
- separation of proprietary trading activities (US Volcker Rule and SRAB Act in France).

The challenges are threefold:

- constantly adapting compliance systems to address regulatory changes in the various global markets where the Group operates and, to this end, having expert resources who are also trained in project management;
- managing a robust compliance risk assessment process, taking into account the specific characteristics of each business and each region;
- having a solid governance at Group level to be able to monitor the progress made in projects and remedial programmes, ensure the normative framework is kept up-to-date, and monitor compliance incidents and the effective reporting of information to General Management, the Board and regulators.

Market abuse

The Compliance Division continued to improve the compliance of its system. Specific focus is placed on the modernisation of automated detection and analysis tools, in addition to the training of Compliance staff in charge of these controls.

"Market abuse" instructions were revised in 2020. These instructions set out the measures to be implemented to prevent or detect market abuse practices that may threaten the integrity of financial markets, namely i) insider trading (transmission and use of privileged information); ii) market manipulation (price manipulation and the spreading of false information).

Regarding **market indices**: the Group has implemented an action plan to control **market manipulation** risks. This plan is now well under way and has enabled contributions to the benchmarks to be supervised and their administration to be rolled out across the Group. In addition to contributions to **benchmark indices** and the administration of indices, the use of indices has been subject to regulatory restrictions since January 2020.

The management of this system has been rolled out through instructions and training.

SEPARATION OF BANKING ACTIVITIES

The Volcker Rule published in December 2013 - which established a prohibition in principle for certain institutions in the financial services sector, such as the Societe Generale Group, to trade on their own account and to purchase or hold covered funds[1] on its own account - was subject to two major amendments in 2019 and 2020: the Volcker 2.0 amendment on trading and the Volcker 2.1 amendment on funds, respectively. These amendments ease the Societe Generale Group's regulatory obligations. The Group's Volcker/FBL system was brought into compliance with these amendments, which are effective as from 1 January 2021.

DERIVATIVES

Regulatory risks related to derivatives market activities are covered by European regulations (EMIR Regulation) and US regulations (Title VII of the Dodd-Frank Act, SEC Rules). These regulations were changed in 2019 (SEC Rules and EMIT), leading the Group to become compliant; in particular by updating the instructions and training required to manage the system.

COMPLIANCE/TAX TRANSPARENCY

Societe Generale Group's principles on combating tax evasion are governed by the Tax Code of Conduct. The Code was updated in March 2017 and approved by the Board of Directors after review by the Executive Committee. It is a public document and can be consulted on the Bank's institutional investor portal: *https://www.societegenerale.com/sites/default/files/documents/Code%20de%20conduite/Code_de_conduite_fiscale_groupe_societe_generale_fr.pdf*.

The five main principles of the Code of Conduct are as follows:

- Societe Generale ensures that the tax rules applicable to its business are followed in all countries where the Group operates, in accordance with international conventions and national laws;
- in its customer relationships, Societe Generale ensures that customers are informed of their tax obligations relating to transactions carried out with the Group, and the Group complies with the reporting obligations that apply to it as bookkeeper or in any other way;
- in its relations with the tax authorities, Societe Generale is committed to strictly respecting tax procedures and ensures that it maintains open and transparent relations to maintain its reputation;
- Societe Generale does not encourage or promote tax evasion for itself, its subsidiaries or its customers;
- Societe Generale has a tax policy in line with its strategy of sustainable profitability and refrains from any operation, whether for its own account or for its clients, whose main purpose or effect is tax motivated, unless this is consistent with the intention of the legislation.

The Board of Directors annually reviews the application of the Code and the procedures and systems in place within the Group to ensure that new products and new entities comply with the Group's tax principles.

Relationships with legislators and tax law policy makers are governed by the Charter for Responsible Advocacy with respect to Public Authorities and Representative Institutions (*https://www.societegenerale.com/sites/default/files/190426-vade-mecum-ri.pdf*)

The Group is committed to a strict policy with regard to tax havens. No Group entity is authorised in a state or territory on the official French list of ETNCs (*États et territoires non coopératifs* in French)[2] and internal rules have been in place since 2003 to monitor an expanded list of countries or territories.

The Group follows the Organisation for Economic Co-operation and Development's (OECD) transfer pricing standards. However, local constraints may require deviations from OECD methodologies, in which case the local constraints must be documented.

The Group publishes information on its entities and activities annually on a country-by-country basis (for more information, see section 2.12 "Information about geographic locations and activities at 31 December 2020", p. 60-61 of the 2021 Universal Registration Document) and confirms that its presence in a number of countries is for commercial purposes only, and not to benefit from special tax provisions. The Group also complies with the tax transparency rules for its own account (CbCR - Country-by-Country Reporting).

The Group is fully committed to implementing regulations aimed at ensuring tax transparency for its customers' accounts (in particular FATCA and Common Reporting Standard – CRS).

Some of the tax regulations define tax transparency requirements. The FATCA (Foreign Account Tax Compliance Act), CRS (Common Reporting Standard), QI (Qualified Intermediary) and DAC 6 (Directive on Administrative Cooperation 6) regulations have the common goal of combating fraud and tax evasion by customers. The risks borne by financial institutions are financial, commercial and reputational in nature. The Group's main challenges involve adapting to regulatory developments, which are becoming increasingly stringent over the years, and strengthening its control systems.

Societe Generale complies with tax transparency standards. The Common Reporting Standard (CRS) enables tax authorities to be systematically informed of income received abroad by their tax residents, including where the accounts are held in asset management structures. Moreover, Societe Generale complies with the requirements of the United States FATCA (Foreign Account Tax Compliance Act), which aims to combat tax evasion involving foreign accounts or entities held by US taxpayers. Non-US financial intermediaries are thus responsible for identifying US taxpayers in their customer base in order to declare the income received by said taxpayers, directly or indirectly, to the US tax administration, thereby enabling an automatic reconciliation with their individual tax returns. The tax transparency objectives have been achieved by generating a tax report filed at national level and sharing tax information between partner countries on the basis of existing bilateral tax treaties and inter-governmental agreements (IGAs).

(1) *The Volcker Rule does not offer a clear definition of a covered fund; it establishes a prohibition in principle to deal with hedge funds or private equity funds, and provides a list of exclusion criteria based on the products and/or the strategy of the fund, which make it possible to prevent this categorisation. For example, pension funds, foreign public funds, property acquisition vehicles and securitisation funds do not fall into the covered funds category.*

(2) *Including the European blacklist.*

Lastly, the Group has implemented the new European Directive on transparency between intermediaries (referred to as DAC 6), which will require the reporting of cross-border tax arrangements. The Group Compliance Division has supported the Group Tax Department in implementing DAC6, more specifically the D regulatory marker regarding schemes aimed at circumventing the CRS and those involving opaque chains of beneficial owners. The first reports are expected to be filed after 31 January 2021.

Importantly, the account-keeping entities of the Private Banking business line are established exclusively in countries with the strictest tax transparency rules imposed by G20 member countries and the OECD. These countries ratified the Convention on Mutual Administrative Assistance in Tax Matters, introduced the automatic exchange of information in financial accounts (CRS) and obtained the "largely compliant" and "compliant" rating as part of the peer review process conducted under the aegis of the OECD. Assets deposited in Private Banking books are subject to enhanced scrutiny using comprehensive due diligence procedures to ensure they are tax compliant.

In accordance with regulatory requirements, Societe Generale also includes tax fraud in its antimoney laundering procedures.

ANTI-CORRUPTION MEASURES

Societe Generale is fully committed to fighting corruption and has given clear undertakings in this respect by participating in the Wolfsberg Group and the Global Compact.

The Group applies strict principles that are included in its Code of Conduct and its "Anti-Corruption and Influence Peddling Code".

Societe Generale's anti-corruption programme is built around the following themes:

- Code of Conduct;
- annual risk mapping;
- appropriate training at all levels (senior management, exposed persons, all employees);
- control systems;
- accounting procedures;
- evaluation of third parties;
- disciplinary system;
- right to whistleblow.

Within this context, processes and tools continue to be strengthened with the provision of staff dedicated to anti-corruption practices within the Group, and the creation of monitoring indicators and new controls - including accounting and operational controls to reduce the risk of corruption.

The Group's anti-corruption instructions have been greatly expanded. Accordingly, the Anti-Corruption and Influence Peddling Code has been updated and supplemented. Furthermore, several instructions and procedures have been published or updated this year, thereby constituting a thorough and updated body of instructions.

The implementation of certain instructions was accompanied by the establishment of Group tools, such as the tool for declaring gifts and invitations (GEMS), the tool for whistleblowing management (WhistleB, now available Group-wide), and the annual conflict of interest declaration tool (DACI).

Training measures have been strengthened, in particular with respect to persons most exposed to the risk of corruption, accounting controllers, and members of General Management and the Board of Directors.

Third-party knowledge procedures have been improved, with special focus on intermediaries, as well as the introduction of due diligence for suppliers and associations benefiting from donations or sponsorship initiatives. The ABC (Anti-Corruption) function now plays an active role in developing KYC (Know Your Customer) processes in the bank's Global Banking business.

A comprehensive training programme is being rolled out to increase the vigilance of employees. The programme was reinforced throughout the Group in 2020 resulting in the following:

- e-learning for all staff: an enhanced version of this training programme was put online in July 2020 (99% completion rate);
- training dedicated to employees most exposed to the risk of corruption (98% completion rate) and to employees in charge of accounting and in charge of accounting and financial controls (418 people trained in webex);
- anti-corruption experts as well as members of the ABC network have completed a diploma course (ACAMS).

CORPORATE SOCIAL RESPONSIBILITY

In keeping with the Group's strategic ambitions, a dedicated team in the Compliance Division is now responsible for Corporate Social Responsibility as the second line of defence. In particular, it oversees the project targeting compliance with the ESG[1] Directive aimed at promoting sustainable investment and strengthening the transparency of ESG investment products and services provided to customers

In 2021, efforts will also be made towards the operational implementation of the Bank's social and environmental commitments by systematically checking exclusion and identification lists, as well as taking sectoral policies into consideration in the onboarding and customer review process. Lastly, there are plans to develop appropriate training courses for affected categories of staff.

DATA PROTECTION

As a trusted partner of its customers, Societe Generale is especially sensitive to personal data protection.

The entry into force, in May 2018, of the new European General Data Protection Regulation (GDPR), which increases the Company's obligations and the level of sanctions in case of non-compliance with these obligations (up to 4% of revenue) has offered an opportunity for the Group and its subsidiaries to further reinforce their compliance system.

Across all Group entities, internal instructions and associated procedures in line with local and European regulations define the rules to apply and the measures to take to guarantee the protection and security of customer and staff data. Measures to inform data subjects and process their demands are in place so that such persons can exercise their rights, notably by way of dedicated digital platforms. A personal data security policy has been defined, which fits in with the Group's overall security strategy, especially as regards cybersecurity. Moreover, as part of GDPR deployment, there has been a specific effort to increase staff awareness through dedicated training. An e-learning module has been introduced for the employees of every entity concerned. At end-2020, 98.5% of employees had undertaken the training.

(1) Environment, Social and Governance.

Lastly, Societe Generale Group has appointed a Data Protection Officer (DPO). Reporting to the Head of Group Compliance, and the main contact for the Personal Data Protection Authority (the CNIL in France), he or she is responsible for ensuring sound Group compliance in terms of personal data protection. He or she has a network of local DPOs and Correspondents throughout the Group entities, and must support them on security issues and personal data usage. As part of his or her duties, the DPO regularly reviews a number of indicators, notably the number and nature of right exercise requests, the internal training completion rate, and the local DPO certification programme launched at the end of 2018.

Other regulatory risks

MEDIATION

The Group employs several methods to inform customers of mediation, one of the alternative dispute resolution measures, including a permanent notice on the back of customer bank account statements. Every entity involved is obliged to comply with the independent mediator's decision.

RISK AND REMUNERATION POLICY

Since the end of 2010, in accordance with the regulatory framework defined by European Directive CRD3, Societe Generale has implemented a specific governance to determine variable remuneration. The rules introduced by this directive apply not only to financial market professionals, but to all persons whose activity is likely to have a substantial impact on the risk profile of the institutions which employ them, including those exercizing control functions.

The regulatory framework defined by the European Directive CRD4 has applied since 1 January 2014. It does not modify the rules determining the variable remuneration of persons whose activity is likely to have an impact on the risk profile of the Group and of the employees who exercise control functions. The above-mentioned principles and governance remain in place within the Group.

According to the principles approved by the Board of Directors as proposed by the Compensation Committee, the remuneration mechanisms and processes for the identified population not only factor in the financial results of the transactions undertaken, but also how these results are generated: control and management of all risks and adherence to compliance rules. Control function employees are remunerated independently of the results of the transactions that they control, and according to criteria specific to their activity.

Variable remuneration includes a non-deferred portion and a deferred portion. The acquisition of the deferred portion of the variable remuneration is subject to three conditions: a minimum length of service, a minimum level of financial performance of the Company and/or the activity, and appropriate management of risks and compliance (malus and clawback provisions). All deferred variables of the regulated population are subject to a non-payment clause to sanction any excessive risk-taking or behaviour deemed unacceptable. A clawback clause enables Societe Generale, subject to applicable regulations, to request the return of deferred variables, in part or in full, after the holding period and for a five-year period after their allocation was included in the Group's plan for deferred variable remuneration allocated for 2020.

At least 50% of this remuneration is paid in shares or equivalent securities. The purpose of these payment methods is to align the remuneration with the Company's performance and risk horizon.

The Risk Division and Compliance Division help define and implement this policy. In particular, every year they independently assess the main activities of Wholesale Banking, and of French and International Retail Banking, and the principal risk takers, together with the desk managers subject to the Separation and Regulation of Banking Activities Act and the Volcker Rule in relation to their risk management and compliance. These assessments are reviewed by General Management and taken into account when determining the amounts of variable remuneration.

Furthermore, Societe Generale has implemented a specific system and governance aimed at the holders of trading mandates to ensure that the remuneration policy genuinely factors in the requirements of the Separation and Regulation of Banking Activities Act of 26 July 2013 and the Volcker Rule.

In keeping with our historical approach and in accordance with the recommendations of the Committee of European Banking Supervisors, several regulatory principles - the portion of deferred remuneration, the acquisition of which is subject to conditions of presence, the minimum performance of the Group and the activity, and appropriate risk and compliance management - apply to a wider population than the regulated population depending on the level of variable remuneration, notably across the scope of Wholesale Banking.

In addition, the Group's annual employee appraisal tool has included a Conduct and Compliance section since 2018, enabling managers to factor in cases of non-compliant employee behaviour with respect to risk management, quality of service and respecting customers' interests. Where an employee has failed to observe conduct and compliance rules, the manager must draft and implement a dedicated action plan to assist him or her. The results of this specific appraisal measure are crucial in determining the employee's career path and remuneration.

The consideration given to risks in the remuneration policy is presented every year to the Risks Committee, and a Director sitting on the Risks Committee also sits on the Compensation Committee.

Management of reputational risk

The management of reputational risk is governed by an internal directive signed by the Societe Generale Group Chief Executive Officer. The control system is intended to prevent, identify, assess and control this risk. It is coordinated by the Compliance Division, which:

- supports Group employees, and more particularly the Compliance Control Officers of the businesses, in their strategy for preventing, identifying, assessing and controlling reputational risk;
- offers and updates training programmes to raise awareness of reputational risk;
- develops a reputational risk dashboard that is communicated quarterly to the Risk Committee of the Board of Directors, based on information from the businesses/Business Units and support functions/Service Units (in particular the Human Resources, Communications, Legal, Corporate Social Responsibility and Data Protection Departments).

Moreover, Chief Compliance Officers dedicated to Business Units take part in the various bodies (new product Committees, *ad hoc* Committees, etc.) organised to approve new types of transactions, products, projects or customers, and formulate a written opinion as to their assessment of the level of risk of the planned initiative, and notably the reputational risk.

The Compliance function transformation programme

The Compliance function transformation programme aims to strengthen compliance risk management through the increased vigilance and awareness of all stakeholders, including businesses, support staff and other units, to increase the operational efficiency of the associated processes and to meet the demands of supervisory and regulatory authorities in the long term.

This programme includes updating the governance and allocating greater resources to the Compliance function, whether in terms of recruitment, training, or modernisation of dedicated information systems and digitalisation. It also relies on a stronger risk-assessment framework and a robust control system. The programme includes a specific component on remediation linked to the agreements signed in 2018 with the US and French authorities.

This updated program's action plan was implemented in 2019 and will continue to be implemented in 2021.

COMPLIANCE REMEDIATION PLAN IN THE WAKE OF AGREEMENTS ENTERED INTO WITH FRENCH AND US AUTHORITIES

In June 2018, Societe Generale entered into agreements with the US Department of Justice (DOJ) and the US Commodity Futures Trading Commission (CFTC) to resolve their investigations into IBOR submissions, and with the DOJ and the French Parquet National Financier (PNF) to resolve their investigations into certain transactions involving Libyan counterparties.

In November 2018, Societe Generale entered into agreements with the US authorities to resolve their investigations into certain US dollar transactions involving countries, persons or entities subject to US economic sanctions.

As part of these agreements, the Bank has committed to enhance its compliance system in order to prevent and detect any violation of anti-corruption and bribery, market manipulation and US economic sanction regulations, and any violation of New York state laws. The Bank has also committed to enhance corporate oversight of its economic sanctions compliance program. The Bank will not be prosecuted if it abides by the terms of the agreements, to which Societe Generale is fully committed.

The Bank has also agreed with the US Federal Reserve to hire an independent consultant to assess the Bank's progress on the implementation of measures to strengthen its compliance program.

To meet the commitments made by Societe Generale as part of these agreements, the Bank has developed a programme to implement these commitments and strengthen its compliance system in the relevant areas. This programme has been placed under the direct supervision of the Group Head of Compliance. In addition, the program's Steering Committee is chaired by a member of the Bank's General Management, and a programme progress report is presented to the Board of Directors on a monthly basis.

In 2020, the Programme was rolled out according to the schedule presented to the internal Governance bodies and the various authorities receiving regular reports on the progress of remedial actions. Moreover, the external audits provided in the agreements have been conducted or are under way.

On 14 December 2020, Societe Generale took note of the termination of proceedings notice issued by the Financial Prosecutor of the French Republic (the *Procureur de la République Française*, or PRF) in connection with certain transactions with Libyan counterparties.

UNITED STATES COMPLIANCE REMEDIATION PLAN

On 19 November 2018, Societe Generale Group and its New York branch (SGNY) entered into an agreement (enforcement action) with the NY State Department of Financial Services regarding the SGNY antimoney laundering compliance program. This agreement requires (i) submitting an enhanced antimoney laundering program, (ii) an antimoney laundering governance plan, and (iii) the performance of an external audit in May 2020.

As a reminder, on 14 December 2017, Societe Generale and SGNY on the one hand, and the Board of Governors of the Federal Reserve on the other hand, agreed to a Cease and Desist order (the "Order") regarding the SGNY compliance programme to adhere to the Bank Secrecy Act ("BSA") and its antimoney laundering ("AML") obligations (the "Anti-Money Laundering Compliance Program"), and regarding some aspects of its Know Your Customer program.

This Cease and Desist Order signed on 14 December 2017 with the FED supersedes the Written Agreement entered into in 2009 between Societe Generale Group and SGNY on the one hand, and the US Federal Reserve and the New York State Financial Services Department on the other hand.

13.2 LITIGATION

The information pertaining to risks ans litigation is included in Note 9 to the consolidated financial statements featured in Chapter 6 of the Universal Registration Document, page 519.

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MODEL RISK

IN BRIEF

Model risk is defined as the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.

14.1 MODEL RISK MONITORING

The Group is fully committed to maintaining a solid governance system in terms of model risk management in order to ensure the efficiency and reliability of the identification, design, implementation, modification monitoring processes, independent review and approval of the models used. An MRM ("Model Risk Management") Department in charge of controlling model risk was created within the Risk Department in 2017. Since then, the model risk management framework has been consolidated and structured and is based today on the following device.

Actors and responsibilities

The model risk management system is implemented by the three independent lines of defence, which correspond to the responsibility of the business lines in risk management, to the review and independent supervision and evaluation of the system and which are segregated and independent to avoid any conflict of interest.

The device is as follows:

- the first line of defence (LoD1), which brings together several teams with diverse skills within the Group, is responsible for the development, implementation, use and monitoring of the relevance over time of the models, in accordance with model risk management system; these teams are housed in the Business Departments or their Support Departments;
- the second line of defence (LoD2) is made up of governance teams and independent model review teams, and supervised by the "Model Risk" Department within the Risk Department;
- the third line of defence (LoD3) is responsible for assessing the overall effectiveness of the model risk management system (the relevance of governance for model risk and the efficiency of the activities of the second line of defence) and l 'independent audit of models: it is housed within the Internal Audit Department.

Governance, steering and monitoring

A MRM Committee chaired by the Risk Director meets at least every three months to ensure the implementation of the management system and monitor the risk of models at Group level. Within the second line of defence and the "Model risk" Department, a governance team is in charge of the design and management of the model risk management system at Group level.

As such:

- the normative framework applicable to all of the Group's models is defined, applied when necessary to the main families of models to provide details on the specifics, and maintained while ensuring the consistency and homogeneity of the system, its integrity and its compliance with regulatory provisions; this framework specifies in particular the definition of expectations with regard to LoD1, the principles for the model risk assessment methodology and the definition of guiding principles for the independent review and approval of the model;
- the identification, recording and updating of information of all models within the Group (including models under development or recently withdrawn) are carried out in the model inventory according to a defined process and piloted by LoD2;
- the monitoring and reporting system relating to model risk incurred by the Group in Senior Management has been put in place. The appetite for model risk, corresponding to the level of model risk that the Group is ready to assume in the context of achieving its strategic objectives, is also formalised through statements relating to risk tolerance, translated under form of specific indicators associated with warning limits and thresholds.

Model life cycle and review and approval process

For each model, risk management is based on compliance with the rules and standards defined for the entire Group by each LoD1 player, it is guaranteed by an effective challenge from LoD2 and a uniform approval process.

The need to examine a model is assessed according to the level of model risk, its model family and applicable regulatory requirements. The independent review by the second line of defence is triggered in particular for new models, periodic model reviews, proposals to change models and transversal reviews in response to a recommendation:

- it corresponds to all the processes and activities which aim to verify the conformity of the functioning and use of the models with respect to the objectives for which they were designed and to the applicable regulations, on the basis of the activities and controls implemented by LoD1;
- it is based on certain principles aimed at verifying the theoretical robustness (evaluation of the quality of the design and development of the model), the conformity of the implementation and use, and the relevance of the monitoring of the model;
- it gives rise to an independent Review Report, which describes the scope of the review, the tests carried out, the results of the review, the conclusions or the recommendations.

The approval process follows the same approval scheme for all models, the composition of governance bodies being able to vary according to the level of model risk, the family of models, the applicable regulatory requirements and the Business Units/Service Units in which model is applicable. Responsible for LoD2, the approval process consists of two consecutive instances:

- the Review Authority which aims to present the conclusions identified by the review team in the independent Review Report and to discuss, allowing for a contradictory debate between LoD1 and LoD2. Based on the discussions, LoD2 confirms or modifies the conclusions of the review report, including the findings and recommendations, without being limited thereto;
- the Approval Authority, a body which has the power to approve (with or without reservation) or reject the use of a model, changes made to the existing model or continuous monitoring of the relevance of the model along the time proposed by the LoD1, from the independent Review Report and the minutes of the Review Authority.

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RISK RELATED TO INSURANCE ACTIVITIES

IN BRIEF

Through its insurance subsidiaries, the Group is also exposed to a variety of risks linked to this business. In addition to balance sheet management risks (interest rate, valuation, counterparty and exchange rate risks), these risks include premium pricing risk, mortality risk and the risk of an increase in claims.

Risk related to insurance activities: through its insurance subsidiaries, the Group is also exposed to a variety of risks linked to this business. In addition to balance sheet management risks (interest rate, valuation, counterparty and exchange rate risks), these risks include premium pricing risk, mortality risk and the risk of an increase in claims.

15.1 MANAGEMENT OF INSURANCE RISKS

There are two main types of insurance risks:

- underwriting risks, particularly risk through life insurance, individual personal protection and non-life insurance. This risk can be biometrical: disability, longevity, mortality, or related to policyholders' behaviour (risk of lapses). To a lesser extent, the Insurance business line is also exposed to non-life and health risks. Such risks can come from pricing, selection, claims management or catastrophic risk;
- risks related to financial markets and ALM: the Insurance business line, mainly through life insurance on the French market, is exposed to instabilities on the financial markets (changes in interest rates and stock market fluctuations) which can be made worse by policyholder behaviour.

Managing these risks is key to the Insurance business line's activity. It is carried out by qualified and experienced teams, with major bespoke IT resources. Risks are monitored and regularly reported, they are framed by risk policies validated by the Board of Directors of each entity.

Risk management techniques are based on the following:

- heightened security for the risk acceptance process, with the aim of guaranteeing that the price schedule matches the policyholder's risk profile and the guarantees provided;
- regular monitoring of indicators on product claims rates in order to adjust certain product parameters, such as pricing or the level of guarantee, if necessary;
- implementation of a reinsurance plan to protect the business line from major/serial claims;
- application of policies on risk, provisioning and reinsurance.

Management of risks linked to the financial markets and to ALM is an integral part of the investment strategy as long-term performance objectives. The optimisation of these two factors is highly influenced by the asset/liability balance. Liability commitments (guarantees offered to customers, maturity of policies), as well as the amounts booked under the major items on the balance sheet (shareholders' equity, income, provisions, reserves, etc.) are analysed by the Finance and Risk Department of the Insurance business line.

Risk management related to financial markets (interest rates, credit and shares) and to ALM is based on the following:

- monitoring short- and long-term cash flows (match between the term of a liability and the term of an asset, liquidity risk management);
- particular monitoring of policyholder behaviour (redemption);
- close monitoring of financial markets;
- hedging against exchange rate risks (both rising and falling);
- defining thresholds and limits per counterparty, per issuer rating and assets class;
- stress tests, the results of which are presented annually at entities' Board of Directors' Meetings, as part of the ORSA Report (Own Risk and Solvency Assessment), transferred to the ACPR after approval by the Board;
- application of policies related to ALM and investment risks.

15.2 INSURANCE RISK MODELLING

The models are reviewed by the Insurance Risks Department, which is the second line of defence in the context of model risk management. The review works relate to the theoretical robustness (evaluation of the quality of design and development) of the models, the use of the model, the conformity of the implementation and the continuous monitoring of the relevance of the model over time. The independent review process ends with (i) a report describing the scope of the review, the tests performed, the results of the review, conclusions or recommendations and by (ii) validation Committees. The model control system gives rise to recurring reporting to the appropriate bodies.

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OTHER RISKS

IN BRIEF

This section describes equity risks and other risks not described in previous chapters.

16.1 EQUITY RISKS

Investment strategies and purpose

The Societe Generale Group's exposure to its non-trading equity portfolio relates to several of the Bank's activities and strategies. It includes equities and equity instruments, mutual fund units invested in equities, and holdings in the Group's subsidiaries and affiliates which are not deducted from shareholders' equity for the purpose of calculating solvency ratios. Generally speaking, due to their unfavourable treatment under regulatory capital, the Group's future policy is to limit these investments.

- First, the Group has a portfolio of industrial holdings which mainly reflect its historical or strategic relations with these companies;
- It also has some minority holdings in certain banks for strategic purposes, with a view to developing its cooperation with these establishments;
- In addition, the equities that are not part of the trading book include Group shares in small subsidiaries which are not included in its consolidation scope and which operate in France and abroad. This includes various investments and holdings that are ancillary to the Group's main banking activities, particularly in French Retail Banking, Corporate and Investment Banking, and Securities Services (private equity activities in France, closely linked with banking networks, stock market bodies, brokerages, etc.);
- Lastly, Societe Generale and some of its subsidiaries may hold equity investments related to their asset management activities (particularly seed capital for mutual funds promoted by Societe Generale), in France and abroad.

Monitoring of banking book equity investments and holdings

The portfolio of industrial holdings was significantly reduced in recent years, further to the disposal of non-strategic lines. It now includes only a limited number of investments. It is monitored on a monthly basis by the Group's Finance Division and, where necessary, value adjustments are recognised quarterly in accordance with the Group's provisioning policy.

The holdings that are ancillary to the Group's banking activity are monitored on a quarterly basis by the Group's Finance Division and, where necessary, value adjustments are recognised quarterly in accordance with the Group's provisioning policy. Private equity activities in France are subject to dedicated governance and monitoring, within the budgets periodically reviewed by the Group's General Management. Investment or disposal decisions take the financial aspects and the contribution to the Group's activities into consideration (supporting customers in their development, cross-selling with flow activities, Corporate and Investment Banking, Private Banking, etc.).

Valuation of banking book equities

From an accounting perspective, Societe Generale's exposure to equity investments that are not part of its trading book is classified within financial assets measured at fair value through net income or, using the option, at fair value through other comprehensive income (Cf. Consolidated financial statement – Note 3 Financial Instruments).

The Societe Generale Group's exposure to equity investments that are not part of the trading book is equal to their book value representative of a fair value based on a measure at mark to market or at mark to model.

The following table presents these exposures at end-December 2019 and 2018, for both the accounting scope and the regulatory scope. Regulatory data cannot be reconciled with data from consolidated financial statements, specifically because the regulatory scope excludes equity investments held on behalf of clients by the Group's insurance subsidiaries.

TABLE 110: SHARES AND EQUITIES IN THE BANKING BOOK

(In EURm)	**31.12.2020**	**31.12.2019**
Shares and equities in the Banking Book - Statutory perimeter	16,913	18,796
o.w shares and other equity securities at fair value through profit or loss	*2,561*	*2,492*
o.w. shares and other equity securities at fair value through other comprehensive income	*14,351*	*16,304*
Shares and equities in the Banking Book - Prudential scope (Exposure at default)	7,253	7,156
o.w shares and other equity securities at fair value through profit or loss	*6,994*	*6,917*
o.w. shares and other equity securities at fair value through other comprehensive income	*259*	*239*

Unrealised gains and losses related to changes in fair value, since the end of the previous year are recognised in:

- net income statement "Net gains and losses on financial transactions" for equity investment classified into Financial assets at fair value through profit or loss; and
- other comprehensive income "Unrealised gains or losses without subsequent recycling in the income statement" for equity investment classified into Financial assets at fair value through other comprehensive income.

For investments in listed shares, the fair value is estimated based on the stock price at closing date. For investment in unlisted shares, fair value can be estimated based on one or more of the following methods:

- quantitative method such as Discounted Cash Flows (DCF), Discounted Dividend Model (DDM);
- pro rata share of the entity's net assets;
- recent transactions identified on the entity's share (stake acquired by third party, valuation assessed by experts);
- recent transactions identified on entities from the same sector (earnings or NAV multiples, etc.).

Dividends received from equity investment are recognised in the net income statement "Net gains and losses on financial transactions".

In the event of a disposal, gains and losses resulting from a change in fair value occurring since the end of the previous year are recognised in:

- net income statement "Net gains and losses on financial transactions" for equity investment classified into Financial assets at fair value through profit or loss; and
- other comprehensive income "Unrealised gains or losses without subsequent recycling in the income statement" for equity investment classified into Financial assets at fair value through other comprehensive income. Gains and losses on equity investment disposals are transferred to Reserves in the subsequent accounting period following the disposal.

TABLE 111: NET GAINS AND LOSSES ON BANKING BOOK EQUITIES AND HOLDINGS

(In EURm)	**31.12.2020**	**31.12.2019**
Gains and losses on the sale of shares and equity	155	388
Net gains/losses on banking book	49	33

Regulatory capital requirements

To calculate the risk-weighted assets under Basel 3, the Group applies the advanced approach (IRB) to the majority of its non-trading equity portfolio. Shares in private equity companies are assigned a risk-weighting coefficient of 190%, shares in listed companies a coefficient of 290%, and shares in unlisted companies, including holdings in insurance subsidiaries, a coefficient of 370%. Furthermore, if they are not deducted from own funds, material investments in the capital of finance companies are assigned a weighting coefficient of 250%.

As at 31 December 2020, the Group's risk-weighted assets related to its non-trading equity portfolio, and its corresponding capital requirements, were as follows:

TABLE 112: CAPITAL REQUIREMENTS RELATED TO BANKING BOOK EQUITIES AND HOLDINGS[1]

(In EURm)			**31.12.2020**			**31.12.2019**		
Equities and holdings	**Approach**	**Weighting**	**Exposure at default**	**Risk-weighted assets**	**Capital requirements**	**Exposure at default**	**Risk-weighted assets**	**Capital requirements**
Private equity	Standardised	150%	-	-	-	-	-	-
Private equity	Advanced approach (IRB)	190%	351	668	53	185	352	28
Financial securities	Advanced approach (IRB)	250%	517	1,292	103	-	-	-
Financial securities	Standardised	250%	10	26	2	503	1,257	101
Listed shares	Advanced approach (IRB)	290%	25	74	6	38	111	9
Unlisted shares and insurance	Advanced approach (IRB)	370%	5,381	19,908	1,593	5,297	19,599	1,568
TOTAL			**6,285**	**21,968**	**1,757**	**6,023**	**21,318**	**1,705**

(1) Excluding cash investments.

16.2 RESIDUAL VALUE RISK

Through its Specialised Financial Services division, mainly in its long-term vehicle leasing subsidiary, the Group is exposed to residual value risk (where the net resale value of an asset at the end of the leasing contract is less than expected).

Risk identification

Societe Generale holds, inside its ALDA Business Units (automobile leasing activity) cars on its balance sheet with a risk related to the residual value of these vehicles at the moment of their disposals. This residual value risk is managed by ALD Automotive (ALDA).

The Group is exposed to potential losses in a given reporting period caused by (i) the resale of vehicles associated with leases terminated in the reporting period where the used car resale price is lower than its net book value and (ii) additional depreciation booked during the lease term if the expected residual values of its vehicles decline below the contractual residual value. The future sales results and estimated losses are affected by external factors like macroeconomic, government policies, environmental and tax regulations, consumer preferences, new vehicles pricing, etc.

ALDA gross operating income derived from car sales totalled EUR 61 million at 31 December 2020 versus EUR 75 million at 31 December 2019.

Risk management

The residual value setting procedure defines the processes, roles and responsibilities involved in the determination of residual values that will be used by ALDA as a basis for producing vehicle lease quotations.

A Residual Value Review Committee is held at least twice a year within each operating entity of ALDA. This Committee debates and decides residual values, taking into account local market specificities, documenting its approach, ensuring that there is a clear audit trail.

A dedicated central ALDA team controls and validates the proposed residual values prior to their being notified to the operating entities and updated in the local quotation system. This team informs ALD's Group Finance Director and Risk Manager in case of disagreements.

Additionally, the fleet revaluation process determines an additional depreciation in countries where an overall loss on the portfolio is identified. This process is performed locally twice a year for operating entities owning more than 5,000 cars (once a year for smaller entities) under the supervision of the central team and using common tools and methodologies. This depreciation is booked in accordance with accounting standards.

16.3 STRATEGIC RISKS

Strategic risks are defined as the risks inherent in the choice of a given business strategy or resulting from the Group's inability to execute its strategy. They are monitored by the Board of Directors, which approves the Group's strategic direction and reviews them at least once every year. Moreover, the Board of Directors approves strategic investments and any transaction (particularly disposals and acquisitions) that could significantly affect the Group's results, the structure of its balance sheet or its risk profile.

Strategic steering is carried out under the authority of the General Management, by the General Management Committee (which meets weekly without exception), by the Group Strategy Committee (which meets every two months) and by the Strategic oversight Committees of the Business Units and Service Units (which meet at least once a year for each of the 25 Units). The make-up of these various bodies is set out in the Corporate Governance chapter of the 2021 Universal Registration Document, Chapter 3 (pages 63 and following). The Internal Rules of the Board of Directors (provided in Chapter 7 of the 2021 Universal Registration Document, page 615) lay down the procedures for convening meetings.

16.4 ENVIRONMENTAL AND SOCIAL RISKS

The Group's approach in terms of environmental and social issues is set out in Chapter 5 of the Universal Registration Document (pages 267 and following).

16.5 CONDUCT RISK

The Group is also exposed to conduct risk through all of its core businesses. The Group defines conduct risk as resulting from actions (or inactions) or behaviours of the Bank or its employees, inconsistent with the Group's Code of Conduct, which may lead to adverse consequences for its stakeholders, or place the Bank's sustainability or reputation at risk.

Stakeholders include in particular our clients, employees, investors, shareholders, suppliers, the environment, markets and countries in which we operate.

See also "Culture and Conduct programme" (pages 280 and 281 of the 2021 Universal Registration Document).

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APPENDICES

17.1 PILLAR 3 CROSS-REFERENCE TABLE

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90 (CRD4)	Return on assets	5 Capital management and adequacy	48
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436 (CRR)	2. Scope of application	5 Capital management and adequacy	47-51; 68-73
		SG website - Capital instruments and TLAC eligible SNP	
		SG website - Information about the consolidation scope	
		SG website - Differences in the scopes of consolidation (LI3)	
437 (CRR)	3. Own funds	5 Capital management and adequacy	51-54; 59-63
438 (CRR)	4. Capital requirements	5 Capital management and adequacy	47; 54-55; 137-138; 154; 186
439 (CRR)	5. Exposure to counterparty credit risk	7 Counterparty credit risk	140-154
440 (CRR)	6. Capital buffers	5 Capital management and adequacy	66-67
441 (CRR)	7. Indicators of global systemic importance	SG website - Information and publication section	
442 (CRR)	8. Credit risk adjustments	6 Credit risk	79-81; 99-108; 113-114; 125-134
443 (CRR)	9. Unencumbered assets	12 Liquidity risk	206-208
444 (CRR)	10. Use of ECAIs	6 Credit risk 8 Securitisation	82; 96; 115-116; 123-124 167
445 (CRR)	11. Exposure to market risk	9 Market risk	172-186
446 (CRR)	12. Operational risk	10 Operational risk	188-195
447 (CRR)	13. Exposures to equities not included in the trading book	16 Equity risk	228-229
448 (CRR)	14. Exposure to interest rate risk on positions not included in the trading book	11 Structural interest rate and exchange rate risks	199-200
449 (CRR)	15. Exposure to securitisation positions	8 Securitisation	156-170
450 (CRR)	16. Remuneration policy	First update of the Pillar 3 report (planned)	
451 (CRR)	17. Leverage	5 Capital management and adequacy	57-58; 64-66
452 (CRR)	18. Use of the IRB Approach to credit risk	6 Credit risk	82-90; 95; 117-122
453 (CRR)	19. Use of credit risk mitigation techniques	6 Credit risk 7 Counterparty credit risk	78-79; 135-136 141
454 (CRR)	20. Use of the advanced measurement approaches to operational risk	10 Operational risk	188-195
455 (CRR)	21. Use of internal market risk models	9 Market risk	172-186
437a (CRR2)	22. TLAC and related eligible instruments	5 Capital management and adequacy SG website - Capital instruments and TLAC eligible SNP	56-57

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(1) Universal Registration Document

17.3 MAPPING TABLE OF EXPOSURE CLASSES

As part of the presentation of credit risk data, the table below shows the link between the synthetic presentations of certain tables and the exposure classes detailed in the tables requested by the EBA in the context of the revision of Pillar 3.

Method	COREP exposure class	Pillar 3 exposure class
AIRB	Central governments and central banks	Sovereigns
AIRB	Institutions	Institutions
AIRB	Corporate - SME	Corporates
AIRB	Corporate - Specialised lending	Corporates
AIRB	Corporate - Other	Corporates
AIRB	Retail - Secured by real estate SME	Retail
AIRB	Retail - Secured by real estate non-SME	Retail
AIRB	Retail - Qualifying revolving	Retail
AIRB	Retail - Other SME	Retail
AIRB	Retail - Other non-SME	Retail
AIRB	Other non credit-obligation assets	Others
AIRB	Default funds contributions	Others
FIRB	Central governments and central banks	Sovereigns
FIRB	Institutions	Institutions
FIRB	Corporate - SME	Corporates
FIRB	Corporate - Specialised lending	Corporates
FIRB	Corporate - Other	Corporates
IRB	Equity Exposures	Others
IRB	Securitisation	Others
Standardised	Central governments or central banks	Sovereigns
Standardised	Regional governments or local authorities	Institutions
Standardised	Public sector entities	Institutions
Standardised	Multilateral development banks	Sovereigns
Standardised	International organisations	Sovereigns
Standardised	Institutions	Institutions
Standardised	Corporates	Corporates
Standardised	Retail	Retail
Standardised	Secured by mortgages on immovable property	Others
Standardised	Exposures in default	Others
Standardised	Items associated with particularly high risk	Others
Standardised	Covered bonds	Others
Standardised	Claims on institutions and corporate with a short-term credit assessment	Others
Standardised	Claims in the form of CIU	Others
Standardised	Equity Exposures	Others
Standardised	Other items	Others
Standardised	Default funds contributions	Others
Standardised	Securitisation	Others

17.4 GLOSSARY

ABBREVIATIONS TABLE

Abbreviation	Definition	Glossary
ABS	Asset-Backed Securities	Securitisation
CCF	Credit Conversion Factor	CCF
CDS	Credit Default Swap	Securitisation
CDO	Collaterallised Debt Obligation	Securitisation
CLO	Collateralised Loan Obligation	Securitisation
CMBS	Commercial Mortgage-Backed Securities	Securitisation
CRD	Capital Requirement Directive	CRR/CRD4
CRM (credit risk)	Credit Risk Mitigation	Credit Risk Mitigation
CRM (market risk)	Comprehensive Risk Measure	Comprehensive Risk Measurement
CRR	Capital Requirement Regulation	CRR/CRD4
CVaR	Credit Value at Risk	Credit Value at Risk (CVaR)
EAD	Exposure At Default	Exposure At Default (EAD)
EL	Expected Loss	Expected Loss (EL)
IMM	Internal Model Method	IMM
AIRB	Internal ratings-based approach - Advanced	AIRB
FIRB	Internal ratings-based approach - Foundation	FIRB
IRC	Incremental Risk Charge	IRC
G-SIB	Global Systemically Important Banks (see SIFI)	SIFI
LCR	Liquidity Coverage Ratio	Liquidity Coverage Ratio (LCR)
LGD	Loss Given Default	Loss Given Default (LGD)
NSFR	Net Stable Funding Ratio	Net Stable Funding Ratio (NSFR)
PD	Probability of Default	Probability of Default (PD)
RMBS	Residential Mortgage-Backed Securities	Securitisation
RW	Risk Weight	RWA - Risk-Weighted Assets
RWA	Risk-Weighted Assets	RWA - Risk-Weighted Assets
SVaR	Stressed Value at Risk	Stressed Value at Risk (SVaR)
VaR	Value at Risk	Value at Risk (VaR)

Asset-Backed Securities (ABS): see “Securitisation”.

Basel 1 (Accords): prudential framework established in 1988 by the Basel Committee to ensure solvency and stability in the international banking system by setting an international minimum and standardised limit on banks’ capital bases. It notably establishes a minimum capital ratio—a proportion of the total risks taken on by banks—which must be greater than 8%. (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012)

Basel 2 (Accords): prudential framework used to better assess and limit banks’ risks. It is focused on banks’ credit, market and operational risks. (Source: Bank of France Glossary - *Documents et Débats* - No. 4 – May 2012)

Basel 3 (Accords): further changes to prudential standards which included lessons from the 2007-2008 financial crisis. They supplement the Basel 2 Accords by improving the quality and quantity of banks’ required capital. They also implement minimum requirements in terms of liquidity risk management (quantitative ratios), define measures to limit the financial system’s procyclicality (capital buffers that vary according to the economic cycle) and even strengthen requirements related to systemically significant banks (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012). The Basel 3 Accords are defined in Europe in Directive 2013/36/EU (“CRD4”) and Regulation 575/2013 (“CRR”) that have been in force since 1 January 2014.

Bond: a bond is a fraction of a loan, issued in the form of a security, which is tradable and—in a given issue—grants rights to the issuer according to the issue's nominal value (the issuer being a company, public sector entity or government).

Cash Generating Unit (CGU): the smallest identifiable set of assets which generates incoming cash flow which is generally independent from incoming cash flow generated by other assets or sets of assets in accordance with the IAS 36 accounting standard. "In accordance with IFRS standards, a company must determine the largest number of cash generation units (CGU) which make it up; these CGU should be generally independent in terms of operations and the Company must allocate assets to each of these CGU. Impairment testing must be conducted at the CGU level periodically (if there are reasons to believe that their value has dropped) or annually (if they include goodwill)." (Source: Les Echos.fr, citing Vernimmen)

Collateral: transferable asset or guarantee used as a pledge for the repayment of a loan in the event that the borrower cannot meet its payment obligations. (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012)

Collateralised Debt Obligation (CDO): see "Securitisation".

Collateralised Loan Obligation (CLO): see "Securitisation".

Commercial Mortgage-Backed Securities (CMBS): see "Securitisation".

Common Equity Tier 1 capital: includes principally share capital, associated share premiums and reserves, less prudential deductions.

Common Equity Tier 1 ratio: ratio between Common Equity Tier 1 capital and risk-weighted assets, according to CRD4/CRR rules. Common Equity Tier 1 capital has a more restrictive definition than in the earlier CRD3 Directive (Basel 2).

Cost/income ratio: ratio indicating the share of net banking income (NBI) used to cover the Company's operating costs. It is determined by dividing management fees by the NBI.

Comprehensive Risk Measurement (CRM): capital charge in addition to Incremental Risk Charge (IRC) for the credit activities correlation portfolio which accounts for specific price risks (spread, correlation, collection, etc.) The CRM is a 99.9% risk factor, meaning the highest risk obtained after eliminating the 0.1% most unfavourable incidents.

Cost of commercial risk in basis points: the cost of risk in basis points is calculated comparing the net cost of commercial risk to loan outstanding at the start of the period. Net commercial risk load equals the cost of risk calculated for credit commitments (balance sheet and off-balance sheet), *i.e.*, allocations – recaptures (whether used or not used) + Losses on non-collectable receivables – collections on amortised loans and receivables. Allocations and recaptures of dispute provisions are excluded from this calculation.

Counterparty credit risk: risk of losses stemming from market operations, should a counterparty fail to meet its payment obligations. The future market value of the exposure and the counterparty's credit quality are uncertain and may vary over time as underlying market parameters change.

Credit Conversion Factor (CCF): the ratio between the currently undrawn amount of a commitment that could be drawn and that would therefore be exposed to default and the currently undrawn amount of the commitment, the extent of the commitment being determined by the authorised limit, unless the unauthorised limit is higher.

Credit Default Swaps (CDS): insurance mechanism against credit risk in the form of a bilateral financial contract, in which the protection buyer periodically pays the seller in return for a guarantee to compensate the buyer for losses on reference assets (government, bank or corporate bond) if a credit event occurs (bankruptcy, payment default, moratorium, restructuring). (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012)

Credit risk: risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. This risk includes the risk linked to securitisation activities and may be further amplified by individual, country and sector concentration risk.

Credit Risk Mitigation (CRM): a technique used by an institution to reduce the credit risk associated with an exposure or exposures that the institution continues to hold;

Credit Value at Risk (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.

CRD4/CRR (Capital Requirement Regulation): the Directive 2013/36/EU ("CRD4") and the Regulation (EU) No. 575/2013 ("CRR") constitute the corpus of the texts transposing Basel 3 in Europe. They therefore define the European regulations relating to the solvency ratio, large exposures, leverage and liquidity ratios, and are supplemented by the European Banking Authority's ("EBA") technical standards.

Derivative: a financial asset or financial contract, the value of which changes based on the value of an underlying asset, which may be financial (equities, bonds, currencies, etc.) or non-financial (commodities such as agricultural commodities, etc.). Depending on the circumstances, this change may be accompanied by a leverage effect. Derivatives can take the form of securities (warrants, certificates, structured EMTNs, etc.) or the form of contracts (forwards, options, swaps, etc.).

Doubtful loan coverage rate: ratio between portfolio provision and depreciation and doubtful outstanding (customer loans and receivables, loans and receivables with credit institutions, finance leases and basic leases).

Expected Credit Loss (ECL): Expected loss of credit materialised by accounting of a provision based on asset valuation.

Expected Loss (EL): losses that may occur given the quality of a transaction's structuring and all measures taken to reduce risk, such as collateral.

Exposure At Default (EAD): Group exposure to default of a counterparty. The EAD includes both balance sheet and off-balance sheet exposures. Off-balance sheet exposures are converted to their balance sheet equivalent using internal or regulatory conversion.

Fair value: the amount for which an asset could be exchanged or a liability settled, between informed and consenting parties under normal market conditions.

Gross rate of doubtful outstanding: ratio between doubtful outstanding and gross book loan outstanding (customer loans and receivables, loans and receivables with credit institutions, finance leases and basic leases).

Haircut: percentage by which the market value of securities is reduced to reflect their value in the context of stress (counterparty or market stress risk). The extent of the reduction reflects the perceived risk.

Impairment: recording of probable loss on an asset. (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012)

Incremental Risk Charge (IRC): an incremental charge for default and migration risks for non-securitised products. It charges capital requirement in respect of the risk of changes in rating and default of transmitters to horizon one year for the portfolio of trading (bonds and CDS) debt instruments. IRC is a Value at Risk to 99.9% that is the biggest risk obtained after removal of 0.1% of the most adverse occurrences.

Insurance-related risks: Through its insurance subsidiaries, the Group is also exposed to a variety of risks linked to this business. In addition to balance sheet management risks (interest rate, valuation, counterparty and exchange rate risks), these risks include premium pricing risk, mortality risk and the risk of an increase in claims.

Internal Model Method (IMM): Internal method used to determine exposure to counterparty credit risk. The banking models used are subject to validation by the supervisor. The application of these internal models has an impact on the method of calculating the EAD of market transactions but also on the method to calculate the Basel Maturity.

Internal Capital Adequacy Assessment Process (ICAAP): process outlined in Pillar 2 of the Basel Accord, by which the Group verifies its capital adequacy with regard to all risks incurred.

Internal Ratings-Based - Advanced (AIRB): banks are allowed to use their own estimated risk parameters (PD, LGD, CCF) for the purpose of calculating regulatory capital.

Internal Ratings-Based - Foundation (FIRB): banks are allowed to use their own estimated PD for the purpose of calculating regulatory capital, other parameters being based on the standardised approach.

Leverage ratio: the leverage ratio intends to be a simple ratio that aims to limit the size of banks' balance sheets. The leverage ratio compares the Tier 1 prudential capital with the accounting balance sheet/off-balance sheet, after restatements of certain items. A new definition of the leverage ratio has been implemented in accordance with the application of the CRR Regulation.

Liquidity: for a bank, the capacity to cover its short-term maturities. For an asset, this term indicates the potential to purchase or sell it quickly on the market, with a limited discount. (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012)

Liquidity Coverage Ratio (LCR): this ratio is intended to promote short-term resilience of a bank's liquidity risk profile. The LCR requires banks to hold risk-free assets that may be easily liquidated on markets in order to meet required payments for outflows net of inflows during a thirty-day crisis period without central bank support (Source: December 2010 Basel document.)

Loss Given Default (LGD): ratio between the loss incurred from exposure to default by a counterparty and the amount of the exposure at the time of default.

Market risk: risk 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, the price of securities (equities or bonds), commodities, derivatives and other assets.

Market stress tests: to assess market risk, alongside the internal VaR and SVaR model, the Group monitors its exposure using market stress test simulations to take into account exceptional market occurrences, based on 26 historical scenarios and eight hypothetical scenarios.

Mezzanine: form of financing between equity and debt. In terms of ranking, mezzanine debt is subordinate to senior debt, but it is still above equity.

Model risk: potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.

Monoline insurer: insurance company participating in a credit enhancement transaction and which guarantees bond issues (for example, a securitisation transaction), in order to improve the issue's credit rating.

Net earnings per share: net earnings of the Company (adjusted for hybrid securities recorded under equity instruments) divided by the weighted average number of shares outstanding.

Net exposure: Initial exposure, net of specific and general provisions in advanced approach and net of specific provisions in the Standardised method.

Net Stable Funding Ratio (NSFR): this ratio aims to promote resilience over a longer time horizon by creating additional incentives for banks to fund their activities with more stable sources of funding. This structural ratio has a time horizon of one year and has been developed to provide a sustainable maturity structure of assets and liabilities. (Source: December 2010 Basel document.)

Operational risk: risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

Own shares: shares held by the Company, especially as part of the Share Buyback programme. Own shares are excluded from voting rights and are not included in the calculation of earnings per share, with the exception of shares held as part of a liquidity contract.

Personal commitment: represented by a deposit, autonomous guarantee or letter of intent. Whoever makes themself guarantor for an obligation binds themself to the creditor to honour that obligation, if the debtor does not honour it themself. An independent guarantee is an undertaking by which the guarantor binds themself, in consideration of a debt subscribed by a third party, to pay a sum either on first demand or subject to terms agreed upon. A letter of intent is an undertaking to do or not to do, the purpose of which is the support provided to a debtor in honouring their obligation.

Physical collateral: guarantees consisting of assets including tangible and intangible property and securities, commodities, precious metals, cash, financial instruments and insurance contracts.

Prime Brokerage: all specific services designed for hedge funds to allow them to better conduct their business. In addition to standard intermediation transactions on financial markets (purchase and sale on behalf of clients), prime brokers offer securities borrowing and lending services and financial services specifically tailored for hedge funds.

Probability of Default (PD): likelihood that a counterparty of the bank will default within one year.

Rating: assessment by a ratings agency (Moody's, Fitch Ratings, Standard & Poor's, etc.) of an issuer's financial solvency risk (company, government or other public institution) or of a given transaction (bond loan, securitisation, covered bond). The rating has a direct impact on the cost of raising capital. (Source: Bank of France Glossary - *Documents et Débats* - No. 4 - May 2012)

Re-securitisation: securitisation of an already securitised exposure where the risk associated with underlyings is divided into tranches and, therefore, at least one of the underlying exposures is a securitised exposure.

Residential Mortgage-Backed Securities (RMBS): see "Securitisation".

Return On Equity (ROE): ratio between the net income restated for interest on hybrid securities recorded under equity instruments and restated book equity (especially hybrid securities), which enables return on capital to be measured.

Risk appetite: level of risk by type and by business line, which the Group is prepared to take on with regard to its strategic objectives. Risk appetite is derived using both quantitative and qualitative criteria. Exercising risk appetite is one of the strategic steering tools available to the Group's decision-making bodies.

Risk Weight: percentage of weighting of exposures which is applied to a particular exposure in order to determine the related risk-weighted asset.

RWA – Risk-Weighted Assets: risk-weighted outstanding balances or risk-weighted assets; exposure multiplied by its risk weighting.

Securitisation: transaction that transfers a credit risk (loan outstanding) to an organisation that issues, for this purpose, tradable securities to which investors subscribe. This transaction may involve a transfer of outstanding (physical securitisation) or a transfer of risk only (credit derivatives). Securitisation transactions may, if applicable, enable securities subordination (tranches).

The following products are considered as securitisations:

- **ABS**: Asset-Backed Securities;
- **CDO**: Collatelalised Debt Obligation, a debt security backed by an asset portfolio (bank loans (residential) or corporate bonds). Interest and principal payments may be subordinated (tranche creation);
- **CLO**: Collateralised Loan Obligation, a CDO backed by an asset portfolio of bank loans;
- **CMBS**: Commercial Mortgage-Backed Securities, a debt security backed by an asset portfolio of corporate real estate loans leading to a mortgage;
- **RMBS**: Residential Mortgage-Backed Securities, a debt security backed by an asset portfolio of residential mortgage loans.

Share: equity stake issued by a company in the form of shares, representing a share of ownership and granting its holder (shareholder) the right to a proportional share in any distribution of profits or net assets as well as a right to vote in a General Meeting of Shareholders.

SIFI (Systemically Important Financial Institution): the Financial Stability Board (FSB) coordinates all of the measures to reduce moral hazard and risks to the global financial system posed by Globally Systemically Important Financial Institutions (G-SIFI). These banks meet criteria defined in the Basel Committee rules included in the document entitled “Global systemically important banks: Assessment methodology and the additional loss absorbency requirement” and published as a list in November 2011. This list is updated by the FSB each November (29 banks to date).

Stressed Value at Risk (SVaR): identical to the VaR approach, the calculation method consists of a “historical simulation” with “one-day” shocks and a 99% confidence interval. Unlike the VaR, which uses 260 scenarios of daily variation year-on-year, the stressed VaR uses a fixed one-year window that corresponds to a historical period of significant financial tensions.

Structural interest rate and exchange rate risks: risk of losses of interest margin or value of the fixed rate structural position arising from variations in interest or exchange rates. Structural interest rate and exchange rate risks arise from commercial activities and from transactions entered into by the Corporate Centre.

Structured issue or structured product: a financial instrument combining a bond product and an instrument (an option for example) providing exposure to all types of assets (equities, currencies, interest rates, commodities). Instruments can include a total or partial guarantee in respect of the invested capital. The term “structured product” or “structured issue” also refers to securities resulting from securitisation transactions, where holders are subject to a ranking hierarchy.

Tier 1 capital: comprises Common Equity Tier 1 capital and Additional Tier 1 capital. The latter corresponds to perpetual debt instruments, with no incentive to redeem, less prudential deductions.

Tier 1 ratio: ratio between Tier 1 capital and risk-weighted assets.

Tier 2 capital: supplementary capital consisting mainly of subordinated notes less prudential deductions.

Total capital ratio: ratio between total (Tier 1 and Tier 2) capital and risk-weighted assets.

Treasury shares: shares held by a company in its own equity through one or several intermediary companies in which it holds a controlling share either directly or indirectly. Treasury shares are devoid of voting rights and are not included in the calculation of earnings per share.

Value at Risk (VaR): composite indicator used to monitor the Group’s daily market risk exposure, notably for its trading activities (99% VaR in accordance with the internal regulatory model). It corresponds to the greatest risk calculated after eliminating the top 1% of most unfavourable occurrences observed over a one-year period. Within the framework described above, it corresponds to the average of the second and third largest losses computed.

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