# 2017 RISK REPORT

## PILLAR 3 2016

16/03/2017 version



BUILDING TEAM SPIRIT TOGETHER

Abbreviations used: Millions of euros: EUR m Billions of euros: EUR bn.

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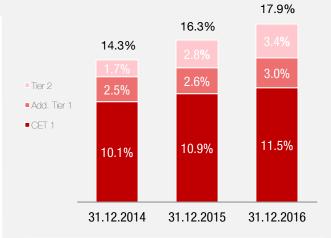
A cross-reference table between disclosures included in the Risk report and CRR and CRD4 requirements is included in chapter 12, in page 191.

## 1. KEY FIGURES

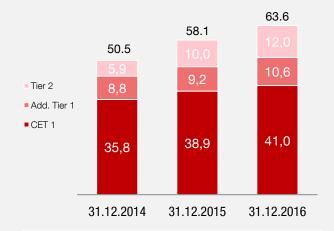
The Risk Report provides in-depth information on Societe Generale's approach and strategy for managing its equity capital and risks.

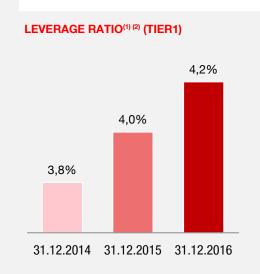
The report also aims to meet the requirements of various stakeholders, including regulators (in compliance with Part 8 of the CRR), investors and analysts.

#### FULLY-LOADED SOLVENCY RATIOS<sup>(1)</sup>

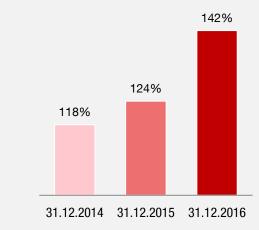


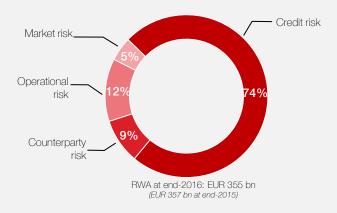
#### **REGULATORY CAPITAL<sup>(1)</sup> (IN EUR BN)**





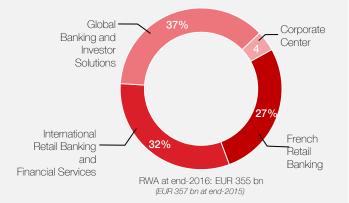
#### LCR RATIO<sup>(1)</sup>



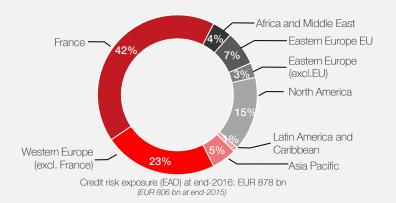


#### **DISTRIBUTION OF RWA BY RISK TYPE**

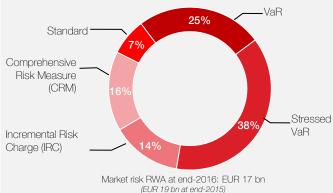




#### GEOGRAPHIC BREAKDOWN OF GROUP CREDIT RISK EXPOSURE (EAD)



#### **DISTRIBUTION OF MARKET RISKS RWA BY RISK TYPE**



#### **ADDITIONAL INDICATORS AND RATIOS**

	31.12.2016	31.12.2015
Total Group exposure (EAD <sup>(3)</sup> ) in EUR bn	878	806
Percentage of Group EAD to industrialised countries	89%	90%
Percentage of Corporate EAD to investment grade counterparties	65%	64%
Cost of risk in basis points (bp) (4)	37	52
Gross doubtful loans ratio (doubtful loans/gross book outstandings)	5%	5.3%
Gross doubtful loans coverage ratio (overall provisions/doubtful loans)	64%	64%
Average annual VaR (in EUR m)	21	22
Group global sensitivity to structural interest rate risk (in % of Group regulatory capital)	< 1.5%	<1.5%
Phased-in Basel 3 Common Equity Tier 1 ratio	11.8%	11.4%

(1) Disclosed ratios are fully loaded, calculated according to CRR/CRD4 rules published on 26th June 2013, including the Danish compromise for Insurance.

(2) Fully loaded ratio calculated according to CRR rules published in October 2014 (Delegated Act).

(3) EAD are presented according to the Capital Requirement Directive as transcripted in French Law.

(4) Calculated by dividing the annual provision and impairment charge by the average end-of-period outstanding amounts of the four quarter closed before current quarter.

## IN BRIEF

This section describes Societe Generale's approach and strategy for managing its risks.

It describes how the risk management functions are organised, how they ensure their independence from the business divisions and how they promote a risk culture throughout the Group.

## 2. GOVERNANCE AND RISK MANAGEMENT ORGANISATION

#### ADEQUACY OF RISK MANAGEMENT ARRANGEMENTS

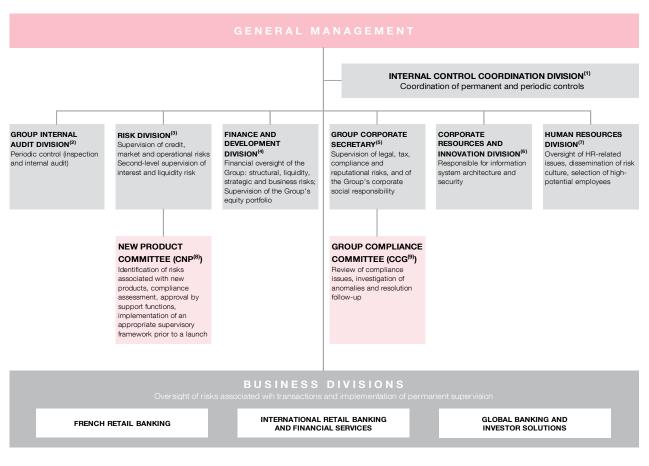
In accordance with Regulation CRR 575/2013 of the European Parliament and of the Council dated 26 June 2013, this report, published under the responsibility of SG Senior Management, sets out the quantitative and qualitative information required on own funds and risk management within SG, to ensure transparency

vis-à-vis market plavers. 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

#### 2.1. INTRODUCTION

Implementing a high-performance and efficient risk management structure is a critical undertaking for 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 of the Order of 3rd November 2014 related to internal control of companies in the banking sector, payment services and investment services subject to control of the French Prudential Supervisory and resolution Authority (Autorité de Contrôle Prudentiel et de Resolution, ACPR) and European regulations CRR/CRD4.



Permanent and periodic controls,, p. 144 of the Registration Document and (1) following.

- Legal and tax risks, p. 184 ; Compliance and reputational risks, p. 179 ; Corporate social responsibility, p. 189. (5)
- (6) See p. 142 (Information Systems Security) of the Registration Document and p. 158 (Operational Risk Insurance) of this report.
- See p 275 of the Registration Document and following, particularly p. 276 (7)
- (Supporting changing professions), p. 277 (High-potential employees), p. 277 (Training) and p. 143 (Remuneration policy).
- (8) New Product Committees, p. 143 of the Registration Document
   (9) Group Compliance Committee, p. 142 of the Registration Document

See p. 147 of the Registration Document and following. Credit risk, p. 54 ; Market risk, p. 136 ; Operational risks, p. 150. (3)

Structural risks, p. 160 ; Liquidity risk, p. 166 ; Equity portfolio, p. 187. (4)

#### 2.2. TYPES OF RISK

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

- Structural interest and exchange rate risk: risk of losses of interest margin or of the value of the fixed-rate structural position due to changes in interest or exchange rates. Structural interest and exchange rate risks arise from commercial activities and from corporate centre transactions.
- Liquidity and funding risk: liquidity risk is defined as the inability of the Group 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.
- Credit and counterparty risk (including concentration effects): risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. Credit risk includes the counterparty risk linked to market transactions and securitisation activities. In addition, credit risk may be further amplified by individual, country and sector concentration risk.
- 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, and the price of securities (equity, bonds), commodities, derivatives and other assets.
- Operational risks: risk of losses resulting from inadequacies or failures in processes, personnel or information systems, or from external events. They include:
  - 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 of harm to customers, markets or the Group itself, or to the image and reputation of the banking sector in general, due to corporate misconduct or inappropriate behaviour on the part of employees or the institution itself.

- Model risk: the Group makes use of models in the course of its activities. Selecting a particular model and configuring its parameters necessarily involves a simplification of reality and can result in an inaccurate assessment of risk.
- Strategic risk: risks inherent in the choice of a given business strategy or resulting from the Group's inability to execute its strategy.
- Risk related to specialised finance activities: through its specialised financial services activities, mainly in its operational vehicle leasing subsidiary, the Group is exposed to residual value risk (when the net resale value of an asset at the end of the lease is less than estimated).
- Risk related to insurance activities: through its insurance subsidiaries, the Group is also exposed to a variety of risks linked to the insurance 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.
- Private equity risk: risk of losses linked to financial holdings of a private equity nature.
- In addition, risks associated with climate change, both physical (increased frequency of extreme weather events) and transition-related (new carbon regulations), have been identified as factors that could aggravate the Group's existing risks.

#### 2.3. RISK APPETITE

Risk appetite is defined as the level of risk that the Group is prepared to assume to achieve its strategic goals. The risk appetite is determined at Group level and is allocated operationally to the business lines and the subsidiaries; it is monitored as described in the "Risk Appetite Framework", which is summarised below.

#### **General framework**

#### GOVERNANCE

The Board of Directors approves the Group risk appetite proposed by General Management. The Risk Division and the Finance and Development Division define the Group's risk appetite and provide monitoring and second-level control of its implementation, together with the Group Compliance Division. The Internal Audit Division periodically reviews the effectiveness of the Risk Appetite Framework.

## DETERMINATION AND ALLOCATION OF THE RISK APPETITE

Risk appetite is developed and allocated based on:

- regular identification and assessment of all material risks to which the Group is exposed; this exercise relies on prospective measurement tools (stress tests);
- a provisional assessment of the Group's profitability and solvency for a baseline scenario as well as a three-year worstcase scenario, to enable the development of the strategic and financial plan;
- an allocation of the risk appetite within the Group, down to the appropriate level, taking into account the risk/profitability profile of the business lines and their growth prospects.

The Group's risk appetite is formalised in a document that determines the general guidelines, policies, targets, limits and thresholds governing the risk appetite of Societe Generale. This document is reviewed annually.

Each year, upstream from the budget process, the Risk Division and the Finance Division submit Group-level profitability and financial solidity targets (rating, solvency, liquidity) to the Board of Directors under the responsibility of the General Management. These targets are designed to ensure:

- compliance, with a sufficient safety margin, with the regulatory obligations to which the Group is subject (in particular, minimum regulatory solvency, leverage and liquidity ratios), pre-empting the implementation of new regulations where possible;
- sufficient resistance to stress scenarios by means of a safety margin (stress normalised by regulators or defined through an internal Group process).

Risk appetite in relation to the major risks to which the Group is exposed is regulated by limits and thresholds. These metrics aid in reaching the Group's financial targets and orientating the Group's profitability profile.

## ALLOCATION OF RISK APPETITE WITHIN THE ORGANISATION

The allocation of risk appetite within the organisation is based on the strategic and financial plan and risk management frameworks.

Based on the Finance Division's proposal, the financial targets defined at the Group level are broken down into budget allocation targets at the business line level as part of the budget and the strategic and financial plan.

Once this process has been completed and after validation by General Management, the Group submits the financial trajectories from the baseline and stressed scenarios to the Board of Directors, verifying that the financial targets previously recommended are met.

Likewise, over and above the financial targets, and based on the proposal from the Finance and Risk Divisions, the limits and thresholds defined at Group level are allocated operationally between the pillars and business lines, which are then responsible for allocating them downstream and monitoring within their remit.

The Group's main subsidiaries define their risk appetite, allocate metrics within their organisation and implement an appropriate risk appetite framework. The Corporate Divisions and their functions ensure consistency with the Group risk appetite. Subsidiaries' risk appetites are validated by their Board of Directors.

#### **Risk Appetite Statement**

#### A DIVERSIFIED BANK MODEL THAT TARGETS SUSTAINABLE DEVELOPMENT

Societe Generale seeks sustainable development based on a diversified and balanced banking model with a firm European base and a targeted global presence in selected areas of strong business expertise; the Group also strives to maintain long-term relationships with its clients, built on the confidence it has earned, and to meet the expectations of all of its stakeholders.

#### This results in:

- an organisation based on three complementary pillars (French Retail Banking, International Retail Banking and Financial Services, Global Banking and Investor Solutions), with a balanced capital allocation between the Group's activities (Retail Banking, International Financial Services, Investment Banking and Investor Solutions) with Retail Banking activities holding a prominent place. The Global Markets activity receives a limited capital allocation;
- a geographically balanced model with a high percentage of revenues generated in mature countries. The Group develops a diversified portfolio of businesses dedicated to individual customers in Europe and Africa. For business, corporate and investor customers, the Group pursues activities in which it has recognised expertise across the world;
- attention paid to the Group's reputation, which it considers a high-value asset that must be protected.

The Group's growth strategy focuses on its existing areas of expertise, its high-quality customer base and the pursuit of synergies within the Group.

#### RELYING ON A STRONG FINANCIAL PROFILE

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

- targeting profitable and lasting development of the business lines;
- 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:
  - satisfaction of the minimum regulatory requirements in the baseline scenario, with a security buffer,
  - a sufficient level of creditor protection, consistent with the Group's goals with respect to the target rating and future regulatory ratios (Total Loss Absorbency Capacity (TLAC) for instance);
- ensuring resilience in its liabilities, which are calibrated taking into account the 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 wholesale funding;
- controlling financial leverage.

The Group's goal with respect to its shareholders is to generate adequate profitability relative to the risks incurred. Therefore, the risk/reward ratio is taken into consideration in measuring and managing profitability, as well as in product and service pricing.

The principles framing risk appetite for the main risks are summarised below.

## STRUCTURAL INTEREST RATE AND EXCHANGE RISKS

The Group assesses and strictly controls structural risks. The mechanism to control interest rate risk, foreign exchange risk and the risk on employee benefits is based on sensitivity or stress limits adapted to each of the various businesses (entities and business lines).

#### LIQUIDITY AND FUNDING RISKS

The Group assesses the solidity of its liquidity profile based on three complementary elements:

controlling liquidity risk.

The Group assesses the liquidity risk over various time horizons, including intraday, taking into account market access restriction risk.

controlling funding risk.

The capacity to raise funding is assessed over a three-year horizon.

complying with regulatory obligations (LCR and NSFR).

The solidity of the liquidity profile is assessed within the Group's prudential scope, taking into account the liquidity situation in major foreign currencies.

The Group's larger entities, in particular those which are subject to local regulatory obligations governing liquidity, also assess and specifically monitor their liquidity profile in conjunction with the Group.

The liquidity and funding risks framework is determined within the Group's ILAAP (Internal Liquidity Adequacy Assessment Process).

## CREDIT AND COUNTERPARTY RISKS (INCLUDING CONCENTRATION EFFECTS)

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

In a credit transaction, risk acceptability is based, first and foremost, on the borrower's ability to meet its commitments. 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.

The Group seeks to diversify risk by controlling individual and sector concentration risk and maintaining a policy of spreading risk by sharing it with other financial partners.

The Group seeks to maintain an exposure to country risks that reflects its strategic selections in terms of its foreign operations and that limits concentrations in high-risk countries.

So as to closely monitor portfolio quality, the Group has established alert thresholds using a series of credit portfolio quality indicators that are monitored quarterly.

The Group defines specific credit policies for sectors or types of credit transaction that present concentration risks or have a specific or intrinsically higher risk profile. This mechanism is bolstered by portfolio limits.

As regards Retail Banking in particular:

- the criteria for granting housing loans take into account the value of the property financed, but are primarily predicated upon an analysis of the borrower's ability to repay the loan. In France, the Group favours loans that are eligible for the *Crédit logement* guarantee;
- consumer credit activities are to be developed through synergies with retail banking activities, as a priority. When these activities target borrowers who are not clients of the retail banking network, they rely on dedicated entities with specialised expertise and robust risk monitoring tools;
- the Group has a moderate appetite for credit risk in private banking activities. This business line targets clients that are inherently low-risk and applies a conservative credit policy, in line with this risk appetite.

#### MARKET RISK

The business development strategy of the Group for market activities is primarily focused on meeting client requirements, with a full range of products and solutions. The 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).

Regular reviewing of these limits ensures that they closely reflect any changes in market conditions.

Within these limits, the global stress test limit, which covers all activities and the main market risk factors, plays a pivotal role in determining the Group's market risk appetite. The risk/reward ratio – represented by a limit in the form of the Global Stress Test to budgeted Net Banking Income ratio – is subject to specific monitoring.

Proprietary trading transactions are segregated within a dedicated subsidiary (Descartes Trading) and are subject to a limited risk appetite.

#### OPERATIONAL RISKS (INCLUDING COMPLIANCE RISK)

The Group has no appetite for operational risk but is prepared to assume a potential loss of approximately 1% of recurring revenue.

The Group's activities strictly comply with all laws and regulations governing financial and banking activities. The Group particularly strives to:

- work with clients and partners whose practices comply with rules on anti-money laundering and countering terrorist financing;
- work with clients and complete transactions in accordance with rules related to international embargos and financial penalties;
- complete transactions, offer products and advisory services and work with partners in accordance with regulations governing, in particular, client protection and market integrity, as well as with its tax and anti-corruption undertakings;
- anticipate and manage conflicts of interest;
- protect the data of its clients and employees;
- develop a culture of compliance among its employees and ensure that they may express concerns and submit complaints ("whistle blowing").

The Group has defined values and principles of conduct which apply to all of its employees:

- it emphasises employee loyalty with respect to clients and the integrity of its practices;
- it develops a strong culture which guides employee behaviour in such a manner as to conduct business ethically and responsibly. This culture is spread through Values (team spirit, innovation, responsibility, commitment), a Code of Conduct and a leadership model which defines the conduct and skills expected of employees in respect of each Group value;
- it ensures that they are implemented and complied with through, in particular, alignment of the HR processes (recruitment, training, appraisals, etc.) with these values and principles of conduct.

With respect to its reputation, Societe Generale is extremely careful, relying on a set of indicators presented via a dashboard distributed to the Executive Committee and the Board of Directors. The prevention and detection of risks to its reputation are integrated within all the Group's operating practices. Protecting the Group's reputation includes making its employees aware of the Group's values.

In a spirit of social and environmental responsibility, the Group has undertaken to act in accordance with a set of business conduct principles laid down in internal rules applicable throughout the Group.

#### 2.4. RISK MAPPING FRAMEWORK AND STRESS TESTS

#### Group risk mapping framework

The risk map is an annual overview of the Group's risk identification process. Risk identification contributes to the overall assessment of the Group's risk profile, and is used in various tasks such as the Internal Capital Adequacy Assessment Process (ICAAP). Prepared by the Risk Division under the authority of the General Management, the risk map is presented annually to the Board of Directors' Risk Committee.

The aim of this approach is to estimate potential material losses for the main types of risk to which the Group is exposed, including credit, market, operational and structural risks. The risk map matches potential losses to specific scenarios within defined scopes. The assessment combines expert analysis and various statistical approaches using historical data.

#### **Stress tests**

Stress tests or crisis simulations are used to assess the potential impact of a downturn in activity on the behaviour of a portfolio, activity or entity. At Societe Generale, they are used to help identify, assess and manage risk, and to evaluate the Group's capital adequacy with regard to risks. Accordingly, they are an important indicator of the resilience of the Group and its activities and portfolios, and a core component in the definition of its risk appetite. The Group's stress test framework covers credit risk, market risk, operational risk, liquidity risk and structural interest rate and exchange rate risks.

Stress tests are based on extreme but plausible hypothetical economic scenarios defined by the Group's economists. These scenarios are translated into impacts on the Group's activities, taking into account potential countermeasures and systematically combining quantitative methods with an expert assessment (risk, finance or business lines).

As such, the stress test framework in place includes:

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

- specific credit stress tests (on portfolios, countries, activities, etc.), performed on a regular basis as well as on request, which complement the global analysis with a more granular approach and allow fine-tuning of the identification, assessment and operational management of risk, including credit risk concentration;
- specific market stress tests, which estimate the loss resulting from an extreme change in market parameters (indexes, credit spreads, etc.). This stress test risk assessment is applied to all the Group's market activities. It is based on a set of historical (3) and hypothetical (15) scenarios, which apply shocks to all substantial risk factors, including exotic parameters (see the "Market risks" section of this report);
- operational risk stress tests, which use scenario analyses and the modelling of losses to calibrate the Group's capital in terms of operational risk, and which are used to assess the exposure to operational losses linked to the severity of economic scenarios, including exposure to rare and extreme losses not covered by the historical period;
- stress tests to analyse the Group's structural fixed-rate position value and interest rate margin sensitivity to structural interest rate risk. The Group measures these sensitivities to different interest rate yield curve configurations (steepening and flattening);
- liquidity stress tests to ensure that the time period over which the Group can continue to operate is respected in a stressed market environment;
- and finally, reverse stress tests, which are conducted to evaluate scenarios that may result in certain key indicators reaching potentially critical thresholds, such as the minimum solvency level as defined within the Group's risk appetite framework.

Along with the internal stress test exercises, the Group is part of a selection of European banks that participate in the large-scale international stress tests supervised by the European Banking Authority and European Central Bank).

#### DEFINITION OF "CORE" AND "STRESSED" ECONOMIC SCENARIOS

#### Core scenario

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

#### Stressed scenario

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

#### 2.5. RISK PLAYERS AND MANAGEMENT

The implementation of a high-performance and efficient risk management system in all businesses, markets and regions in which the bank operates is a critical undertaking for the Societe Generale Group, as is the balance between strong risk culture and the development of its activities

#### The Enterprise Risk Management Programme (ERM)

The first phase of the ERM programme was carried out between 2011 and 2015, and increased the integration of risk prevention and management within the day-to-day management of the bank's businesses. Actions accomplished through the programme and the finalisation of those which remain ongoing have been integrated into the standard tasks of the existing operational teams. The strengthening of the risk culture has been included within the strategic "Culture & Conduct" programme (see "A relationship-banking culture based on common values", p. 243).

The second phase of the programme, which commenced in 2016, consists in coordinating all actions aiming to achieve compliance with the requirements imposed by supervisory authorities related to the risk appetite framework, for all aspects thereof (governance, processes, policy formalisation, adjustment of targets, follow-up, etc.), as well as in terms of

their integration and the corresponding documentation, including formalisation of the framework in writing.

## Players involved in 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 is more specifically responsible for examining the consistency of the internal risk monitoring framework, as well as compliance with this framework and with the applicable laws and regulations.

The Board of Directors' Audit and Internal Control Committee ensures that the risk control systems operate effectively.

### ROLE OF THE BOARD OF DIRECTORS' AUDIT AND INTERNAL CONTROL COMMITTEE\*

The Audit and Internal Control Committee's mission is to monitor issues concerning the preparation and control of accounting and financial information, and to monitor the effectiveness of the internal control and risk assessment, monitoring and management systems.

In particular, it is responsible for:

- monitoring the process for production of the financial information, particularly reviewing the quality and reliability of existing systems, making proposals for their improvement and ensuring that corrective actions have been implemented in the event of a malfunction in the process;
- analysing the draft financial statements to be submitted to the Board of Directors in order, in particular, to verify the clarity of the information provided and assess the relevance and consistency of the accounting methods adopted for drawing up parent company and consolidated financial statements;
- conducting the procedure for selection of the Statutory Auditors and giving an opinion to the Board of Directors, developed in accordance with the provisions of Article 16 of Regulation (EU) no. 537/2014 dated 16<sup>th</sup> April 2014, concerning their appointment or renewal as well as their remuneration;
- ensuring the independence of the Statutory Auditors in accordance with the regulations in force;
- approving, in accordance with Article L. 822-11-2 of the French Commercial Code and the policy adopted by the Board of Directors, the provision of services other than the certification of financial statements, after analysing the risks to the Statutory Auditors' independence and the safeguard measures applied by the latter;
- reviewing the Statutory Auditors' work programme and, more generally, ensuring that the Statutory Auditors monitor the verification of the financial statements in accordance with the regulations in force;
- monitoring the effectiveness of internal control, risk management and internal audit systems, with regard to the procedures for the preparation and processing of accounting and financial information. To this end, the Committee is responsible in particular for:
  - reviewing internal control and risk management within the business segments, divisions and main subsidiaries,
  - reviewing the Group's internal audit programme and giving its opinion on the organisation and functioning of the internal control departments,
  - reviewing the follow-up letters from the banking and market supervisory authorities and issuing an opinion on draft replies to these letters;
- reviewing the reports prepared in order to comply with the regulations in terms of internal control.

The committee met ten times in 2016.

\* Version of the Internal Rules applicable as of 13th January 2017.

#### ROLE OF THE BOARD OF DIRECTORS' RISK COMMITTEE\*

The Risk Committee advises the Board of Directors on the 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.

In particular, it is responsible for:

- preparing the debates of the Board of Directors on documents relating to risk appetite;
- reviewing the risk control procedures, and is consulted for the setting of overall risk limits;
- undertaking a regular review of the strategies, policies, procedures and systems used to detect, manage and monitor the liquidity risk, and communicating its conclusions to the Board of Directors;
- issuing an opinion on the Group's overall provisioning policy, as well as on specific provisions for significant amounts;
- reviewing the reports prepared to comply with the banking regulations on risk;
- reviewing the policy concerning risk management and the monitoring of off-balance sheet commitments, especially in the light of the memoranda prepared to this end by the Finance Division, the Risk Division and the Statutory Auditors;
- reviewing, as part of its mission, whether the prices for the products and services mentioned in books II and III of the French Monetary and Financial Code and offered to clients are consistent with the Company's risk strategy. When these prices do not correctly reflect the risks, it informs the Board of Directors accordingly and gives its opinion on the action plan to remedy the situation;
- without prejudice to the Compensation Committee's missions, reviewing whether the incentives provided for by the compensation policy and practices are consistent with the Company's situation with regard to the risks to which it is exposed, its capital and its liquidity, as well as the probability and timing of expected benefits;
- reviewing the enterprise risk management related to the Company's operations in the United States.

The committee met ten times in 2016.

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

- the Risk Committee, which met 18 times in 2016, discusses the Group's risk strategy, in particular the management of the different risks (credit, country, market and operational risks) as well as the structure and implementation of the risk monitoring system. The Group also has a Large Exposures Committee, which focuses on reviewing large individual exposures.
- the Finance Committee, which defines the Group's financial strategy and ensures the steering of scarce resources (capital, liquidity, balance sheet, fiscal capacity), their allocation and the monitoring of structural risks.
- the Group Internal Control Coordination Committee, which manages the consistency and effectiveness of the internal control mechanism as a whole.
- the Compliance Committee, which comprises the members of the Group Executive Committee and meets quarterly in order to define the main orientations of the Group in terms of compliance. The Head of Compliance presents the main events having occurred over the period, an update on the compliance system, the main regulatory developments and the state of progress on projects.
- the Company's Strategic Architecture Committee, which defines the company's architecture in terms of data, reference systems, operational processes and information systems. It also ensures consistency between Group projects and the defined Group architecture.

#### 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 Executive Committee with all the information needed to assume its role of managing Group strategy under the authority of the Chief Executive Officer.

The Corporate Divisions report directly to General Management or to the Group Corporate Secretary (who in turn reports directly to General Management), responsible for compliance within the Group.

The main responsibilities of the **Risk Division** are to contribute to the development of the Group's activities and profitability by defining the Group's risk appetite (broken down by business) under the aegis of the General Management and in collaboration with the Finance Division and Core Businesses, and to establish a risk management and monitoring system.

In exercising its functions, the Risk Division reconciles independence from the business lines and close cooperation with the Core Businesses, which bear primary responsibility for the transactions that they initiate.

Accordingly, the Risk Division:

- oversees hierarchically or functionally the Group's Risk function. To this end, the Head of Risk Management is responsible for the Group's Risk function as defined by the Order of 3<sup>rd</sup> November 2014;
- is jointly responsible, with the Finance Division, for setting the Group's risk appetite;

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 supervisory authorities;

- contributes to the definition of risk policies, taking into account the aims of the business lines and the relevant risk issues;
- defines and validates risk analysis, assessment, approval and monitoring methods and procedures;
- validates transactions and limits proposed by business managers;
- defines and validates the risk monitoring information system, and ensures its suitability for the needs of the businesses.
- The Group Finance Division, in addition to its financial management responsibilities, also carries out extensive accounting and finance controls. As such:
  - the **Mutualised Accounting Activities Department** is responsible for accounting, regulatory and tax production for entities under its responsibility (o.w. Societe Generale SA); it is also responsible for coordinating the continuous improvement and management of processes for entities in its perimeter;
  - the missions of the ALM Department, the Balance Sheet and Global Treasury Management Department and the Strategic Financial Management Department are detailed in the "Structural and liquidity risks" section, p. 140 of this report.
- The Finance Departments of Core Businesses, which report hierarchically to the Group Finance Division (since 1<sup>st</sup> January 2016) and functionally to the Core Businesses' managers, ensure that the financial statements are prepared correctly at the local level and control the quality of the information in the consolidated financial reports submitted to the Group.
- The Group Compliance Division, which reports to the Corporate Secretary, is responsible for compliance and ensures that the Group's banking and investment activities are compliant with all laws, regulations and ethical principles applicable to them. It also ensures the prevention of reputational risk.

Under the future organisation, to be implemented in 2017, the Group Compliance Division will report directly to General Management.

- The Group Legal Department reports to the Corporate Secretary and monitors the security and legal compliance of the Group's activities, relying if necessary on the legal departments of the Group's subsidiaries and branches.
- The Group Tax Department reports to the Corporate Secretary and monitors compliance with all applicable tax laws in France and abroad.
- The Group Human Resources Division monitors, amongst other things, the implementation of compensation policies.
- The Group Corporate Resources Division is specifically responsible for information system security.
- The Group Internal Audit Division is in charge of internal audits, under the authority of the Head of Group Internal Audit.

In performing their missions, the Risk Division, Compliance Division and Information System Security Department rely on functions in the core businesses and Corporate Divisions, formed by representatives who report to them directly or functionally.

According to the latest voluntary census (31<sup>st</sup> December 2016):

- the Group Risk function numbered approximately 5,122 employees in full time-equivalent (FTE) (including 806 FTE within the Group Risk Division);
- the Compliance function numbered approximately 1,700 FTE;
- the Information System Security function numbered approximately 320 FTE.

#### **Risk management**

#### STRUCTURAL AND LIQUIDITY RISKS

The Group aims to minimise structural interest rate and exchange rate risks as much as possible within consolidated entities. Wherever possible, commercial and Corporate Centre transactions are therefore hedged against interest rate and exchange rate risks. Any structural interest rate risk exposure must comply with the sensitivity limits set for each entity and for the overall Group. As for exchange rates, the Group's policy is to maintain an exchange rate position that reduces the sensitivity of its solvability ratio to exchange rate fluctuations.

Structural risks are managed by the Asset and Liability Management Department of the Group Finance Division. This department defines the normative principles and modelling methods (validated by an ad hoc committee chaired by the Risk Division) applicable to all entities. It also develops monitoring indicators and global stress test scenarios for structural risks. Lastly, the ALM Department checks that the Group's business lines and entities comply with the framework applicable to them.

The second line of defence tasks, focused on the validation of the Group's ALM models and the resulting risk monitoring, are carried out by the Market Risk Department of the Group Risk Division, and have been consolidated within a dedicated ALM Risk Monitoring Department. This Department validates ALM modelling principles as well as model calibrations and backtesting. It also analyses the proposals of the Finance Division pertaining to the definition of ALM risk indicators, stress test scenarios and the associated risk framework. As the second line of defence, the ALM Risk Department also ensures that the risk limits and thresholds are respected and conducts a periodical review of the ALM risk framework in coordination with the first-level control teams.

Each entity carries out first-level controls on structural risks and is responsible for regularly assessing risks incurred, producing the risk report, and developing and implementing hedging options. Each entity is required to comply with Group standards and to adhere to the limits assigned to it.

Given that liquidity is a scarce resource, the Group's objective is:

- to finance its activities at the best possible rates under normal conditions, whilst maintaining adequate buffers to cover outflows in periods of liquidity stress;
- to ensure the stability of the financing for its activities by managing its dependency on market funding and financing stability in line with the timing of its financing needs;
- to maintain its short-term and long-term ratings near its targets.

The scope of the Group's short and long-term financing plan, which supplements customer deposits, is conservative, with reduced concentration in the short-term while ensuring diversification in terms of products and regions.

The Finance Division's Strategic Financial Management Department is responsible for managing scarce resources in accordance with regulatory requirements and the Group's risk appetite and budgetary targets.

The Finance Division's Balance Sheet and Global Treasury Management Department is responsible for managing the Group's balance sheet and liquidity, in particular by implementing financing plans and contingency funding plans in the event of a liquidity crisis.

#### **CREDIT RISK**

Societe Generale's credit policy is based on the principle that any undertaking entailing a credit risk must be based on sound knowledge of the client and the client's business, and an understanding of the purpose and nature of the transaction and the sources of debt repayment. Credit decisions must also ensure that the transaction structure will minimise the risk of loss if the counterparty defaults.

Limits are set for certain countries, geographic regions, sectors, products or types of customers in order to minimise the most significant risks. In addition, major concentration risks are analysed on a regular basis for the entire Group.

Together with Core Businesses, the Risk Division has defined a control and monitoring system based on the credit risk policy in order to supervise credit risk management in the Group. The credit risk policy is reviewed on a regular basis by the Board of Directors' Risk Committee.

Within the **Risk Division**, credit risk supervision is organised by business division (French Retail Banking Networks, International Retail Banking and Financial Services, Global Banking and investor Solutions) and is supplemented by departments with a more cross-business approach (monitoring of country risk and risk linked to financial institutions). The Market Risk Department defines the methods for evaluation of counterparty risk.

Within the Risk Division, each of these departments is responsible for:

- setting global and individual credit limits by client, client group or transaction type;
- authorising transactions submitted by the sales departments in line with the delegation system in place;
- validating credit scores or internal client rating criteria;
- monitoring and supervising large exposures, specific credit portfolios and compromised counterparties;
- approving specific and general provisioning policies.

In addition, a specific department performs comprehensive portfolio analyses and provides the associated reports, including those for the supervisory authorities. A monthly report on the Risk Division's activity is presented to the Risk Committee and specific analyses are submitted to General Management.

#### MARKET RISK

Although primary responsibility for managing risk exposure lies with 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:

- ensures the existence and implementation of an effective market risks monitoring system based on suitable limits;
- assesses the limit requests submitted by the different businesses in the context of the overall limits authorised by the Board of Directors and General Management, and monitors progression towards such limits;
- proposes appropriate market risk limits by Group activity to the Group Risk Committee;
- defines methods for evaluating market risk;
- approves the valuation models used to calculate risk and results;
- defines methodologies for calculating provisions for market risk (reserves and adjustments to earnings).

To carry out these different tasks, the Market Risk Department uses the data and analysis provided by the Market Analysts & Certification Community (MACC) of the Group's Corporate and Investment Banking arm, which independently monitors the Group's market positions on a permanent and daily basis, through:

- daily calculation and certification of market risk indicators based on formal and secure procedures;
- reporting and first-level analysis of these indicators;
- daily monitoring of the limits set for each activity, in conjunction with the Market Risk Department;
- verification of the market parameters used to calculate risks and results, with the Market Risk Department bearing responsibility for validating sources and defining the methods used to determine the parameters;
- monitoring and control of the gross nominal value of positions. This system is based on alert levels applied to all instruments and desks, defined in collaboration with the Market Risk Department, and contributes to the detection of possible rogue trading operations.

Acting in conjunction with the Market Risk Department, MACC defines the architecture and functionalities of the information system used to produce the risk indicators for market operations, and ensures that this system meets the needs of business lines. A daily report on the use of limits on VaR (Value at Risk), stress tests (extreme scenarios) and other major market risk metrics (sensitivity, nominal, etc.) at various levels (either Societe Generale, Global Banking and Investor Solutions, or Global Markets) is submitted to General Management and the managers of the business lines, in addition to a monthly report which summarises the key events in the area of market risk management

#### **RISK QUANTIFICATION PROCEDURES AND METHODOLOGIES**

The Group has been authorised by its supervisory authorities:

 for credit risk, to use the internal ratings-based approach (IRB method) for most of its exposures to credit risk.

Currently, the standard approach is used for certain selected activities and exposures. They have a limited impact on the Group's regulatory capital. The system for monitoring rating models is operational, as required by applicable regulations. This system is described in detail in Chapter 4 of this Registration Document; for these exposures covered by the standard approach, Societe Generale mainly uses the external ratings assigned by Standard & Poor's, Moody's and Fitch Ratings.

 for market risk, to use internal models (VaR – Value at Risk, Stressed VaR, IRC – Incremental Risk Charge, and CRM – Comprehensive Risk Measure).

These models cover almost all of the transactions involved. Only some transactions are still calculated using the standard method. Over the last several years, the Group has implemented significant improvements to its calculation system, which have been approved by the supervisory authorities.

for counterparty risk on market transactions, to use the internal model since 2013 to calculate the EEPE (Effective Expected Positive Exposure) indicator.

Exposure at Default (EAD) linked to counterparty risk has been calculated on the basis of this indicator since 2012 for "simple" products, and since December 2013 its use has been extended to more complex derivative products. This method is used for nearly 96% of transactions (excluding the former Newedge scope). The Group uses the marked-tomarket valuation method for the rest of these transactions.

for operational risks, to use the Advanced Measurement Approach (AMA).

Lastly, its information systems are regularly upgraded to accommodate changes in the products processed and the associated risk management techniques, both locally (within the banking entities) and centrally (Risk Division).

#### OPERATIONAL RISKS (INCL. RISKS RELATED TO INFORMATION SYSTEMS)

The Operational Risk Department ensures the cross-business monitoring and management of operational risk (including risks related to information systems) within the Group, and is responsible for all reporting on the issue to General Management, the Board of Directors and the banking supervisory authorities. It also endeavours to improve the consistency and integrity of the risk prevention system. Procedures and tools have been rolled out within the Group in order to identify, evaluate and manage operational risk:

- Risk and Control Self-Assessment, which establishes an accurate map of the levels of intrinsic and residual risk, having taken into account the quality of risk prevention and control systems;
- Key Risk Indicators, which provide upstream alerts as to the risks of operating losses;
- scenario analyses, which consist in estimating infrequent but severe potential losses to which the Group could be exposed;
- data collection and analysis on internal losses and losses incurred by banks following the materialisation of operational risks;
- monitoring of major action plans within the Group regarding operational risks.

The Business Continuity and Crisis Management function reports to the Operational Risk Department. It is committed to improving the Group's business continuity and crisis plans, notably by testing them on a regular basis, and to boosting integration of this issue throughout the Group.

## A manager in charge of Information System Security and IT operational risks is responsible for coordinating the overall risk management system in this field at Group level.

The system of management, monitoring and communication related to Information System Security and risks is coordinated at Group level by the Head of Information System Security and IT Risk Management within the Corporate Resources Division. This system has been rolled out within each of the core businesses, business lines and entities.

At the operating level, the Group relies on a Computer Emergency Response Team that manages incidents, monitors developments in information system security and combats cybercrime using a multitude of information and supervision sources both internal and external to the Group.

Security risk management systems used by the bank are based on best practices (mainly ISO 27002 and security standards of the French National Agency for Information System Security) and are subject to constant monitoring by the Information System Security function. These systems can be grouped into four broad categories: Awareness, Prevention, Detection and Response.

The risk of cybercrime, which is increasingly significant for banks, is addressed in a cooperative way by the Information System Security and Operational Risk functions, and is monitored by General Management under the Information Security Masterplan.

General Management and all businesses validate the guidelines for implementing the Information Security Masterplan, which is based on five strategic areas:

- securing the most sensitive Group applications;
- securing sensitive data;

- enhancing our detection capabilities and response to cyberattacks;
- securing our customers' online transactions;
- increasing our employees' and customers' awareness of the risks of cybercrime.

The Information Security Masterplan is monitored quarterly by General Management in order to assess progress and adjust the resources allocated. It is regularly updated to reflect technological developments, the emergence of new threats or new uses (e.g. cloud computing).

Identification of the structural focus for the new Information Security Masterplan for 2020 has been undertaken by the Information System Security function in cooperation with the business lines. The objective is to ensure the understanding and management of risks related to information security, and to protect Societe Generale's digital heritage, in particular during the digital transition.

A central team is responsible for IT operational risks not related to information security. In 2016, the relationship between the managerial supervisory controls and the new IT and Security firstlevel control system was defined and approved by most entities. The new IT and Security system is in the process of being rolled out in the business lines.

#### NON-COMPLIANCE RISK

The Group's Corporate Secretary is responsible for monitoring Group compliance. He also ensures Group legal and tax security compliance.

He is assisted by:

the Compliance Department, which verifies that all laws, regulations and ethical principles applicable to the Group's banking and investment services activities are observed, and that all staff respect codes of good conduct and individual compliance. It develops a homogeneous standardised framework, ensures it is respected and organises awarenessraising and training for all stakeholders on the prevention of compliance and reputational risks.

The Compliance Department is organised into four crossdisciplinary departments (Group Financial Security, Governance, expertise and coordination, Control, and Strategic development) and three teams dedicated to checking business line compliance. It coordinates and supervises the Compliance function, its network of Compliance Officers who are responsible for adapting and implementing, in each of the Group's entities, the governance and principles defined.

- the Group Compliance Committee, chaired by the Corporate Secretary, which meets monthly and comprises, in particular, the Compliance Officers from the Core Businesses and Corporate Divisions, as well as the heads of Internal Control Coordination and the Legal Department, and representatives from the Internal Audit Division and the Operational Risk Department. The Committee reviews the most significant events over the period for the entire Group, decides upon the measures to be taken and monitors their implementation. The main issues identified through legal and regulatory monitoring are presented by the Chief Legal Officer. The system in place in the Core Businesses and Corporate Divisions is audited regularly.
- the Legal and Tax Departments, which monitor the legal and tax compliance and security of all of the Group's activities

These Corporate Divisions have hierarchical or functional authority over departments exercising the same type of function in the subsidiaries. The Corporate Division teams steer the

#### **COMPENSATION POLICY AND RISK**

Since the end of 2010, within the regulatory framework defined by the European Capital Requirements Directive (CRD3), Societe Generale has implemented a specific governance to determine variable compensation. In addition to financial markets professionals, the rules established by this Directive also apply to all persons whose activity is liable to have a material impact on the risk profile of the institutions that employ them, including those carrying out control functions.

According to the principles approved by the Board of Directors, based on the proposal of the Compensation Committee, the mechanisms and processes relating to the compensation of such employees take into account not only the financial result generated by the transactions they perform, but also the way in which this result is generated, through the control and management of all risks as well as the observance of risk and compliance policies. The compensation paid to employees performing control functions is independent of the results of the transactions they control, but is instead based on criteria specific to their activity.

The variable part of the compensation includes a non-deferred portion and a deferred portion awarded *pro rata* over three years

guidelines set out in the legal and fiscal policies and are responsible for compliance monitoring and training, as well as for the dissemination of relevant information throughout the Group.

subject to conditions of presence, performance and possible claw-back. Fifty per cent at least of this compensation is awarded in the form of equity or equity-equivalent instruments. These terms of payment aim to align compensation with the company's performance and risk horizon.

The Risk Division and Compliance Division contribute to the definition and application of this policy.

The regulatory framework defined by European Directive CRD4 has been in force since 1<sup>st</sup> January 2014. It does not change the rules on determination of the variable compensation of those persons whose activity is liable to have a material impact on the Group's risk profile or of control function employees. The principles and governance described above remain applicable within the Group.

In addition, Societe Generale has set up a specific system and governance related to trading mandate-holders, to ensure that the remuneration policy complies with the requirements of the French law of 26<sup>th</sup> July 2013 on the separation and regulation of banking activities and of the Volcker Rule.

#### **REPUTATIONAL RISK**

Each quarter, the Compliance Department, using information from the Core Businesses and Corporate Divisions, in particular the Group Communication Division, draws up a risk reputation dashboard. This dashboard is communicated quarterly to the members of the Compliance Committee and at least twice a year to the members of the Audit and Internal Control Committee. Moreover, the business line compliance officers are members of various bodies (new product committees, ad hoc committees, etc.) organised to approve new types of transactions, products, projects or clients, and must prepare a written statement on their assessment of the level of risk, especially reputational risk, involved in the initiative discussed.

#### RISK RELATED TO NEW PRODUCTS AND ACTIVITIES

Each division must submit all new products, projects, businesses or activities to a **New Product Committee** jointly managed by the Risk Division and the relevant Core Business/Corporate Division. The aim is to ensure the following, prior to the launch of a new product, project, business or activity:

- all associated risks have been identified, understood and correctly addressed;
- compliance issues have been assessed with respect to the laws and regulations in force, the codes of good professional conduct and the Group's reputational risk;
- all the support functions have been involved and do not or no longer have any reservations.

This committee is underpinned by a very broad definition of "new product", which ranges from the creation of a new product to the adaptation of an existing product to a new environment or the transfer of activities involving new teams or new systems.

Throughout the whole Group, 637 New Product Committee meetings were held in 2016.

#### 2.6. RISK FACTORS

## 1. The global economy and financial markets continue to display high levels of uncertainty, which may materially and adversely affect the Group's business, financial situation and results of operations.

As part of a global financial institution, the Group's businesses are sensitive to changes in financial markets and economic conditions generally in Europe, the United States and elsewhere around the world. The Group could be confronted with 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 (including oil), currency exchange rates or interest rates, inflation or deflation, sovereign debt rating downgrades, restructuring or defaults, or adverse geopolitical events (including acts of terrorism and military conflicts). Such events, which may develop quickly and thus potentially not be hedged, could affect the operating environment for financial institutions for short or extended periods and have a material adverse effect on the Group's financial situation, results of operations or cost of risk.

Financial markets have in recent years experienced significant disruptions as a result of concerns regarding the sovereign debt of various Eurozone countries and uncertainty relating to the pace of US monetary policy tightening as well as fears related to a slowdown of the Chinese economy. The insufficient adjustment of certain oilproducing countries to the drop in prices is another source of uncertainty. Recently, votes held in the United Kingdom and the United States have illustrated the risk of a return to increased protectionism. Such a movement, if it were to be confirmed and to result in the implementation of strong protectionist measures, could affect the strength of international trade. Moreover, the uncertainty caused by these sudden and major political changes, as well as potential consequences of the upcoming elections in EU countries, could impact economic activity and credit demand, while increasing the volatility of financial markets.

In the Eurozone, the prolonged period of weak demand and low inflation fosters the risk of deflation, which has in the past adversely affected banks, and may continue to do so in the future, through low interest rates, with a particular impact on interest rate margins for retail banks. The Group is exposed to the risk of substantial losses if sovereign states, financial institutions or other credit counterparties become insolvent or are no longer able to fulfil their obligations to the Group. A resumption of tensions in the Eurozone may trigger a significant decline in the Group's asset quality and an increase in its loan losses in the affected countries. The Group's inability to recover the value of its assets in accordance with the estimated percentages of recoverability based on past historical trends (which could prove inaccurate) could further adversely affect its performance. In the event of a pronounced macroeconomic downturn, it may also become necessary for the Group to invest resources to support the recapitalisation of its businesses and/or subsidiaries in the Eurozone or in countries closely connected to the Eurozone such as those in Central and Eastern Europe. The Group's activities and/or subsidiaries in certain countries could become subject to emergency legal

measures or restrictions imposed by local or national authorities, which could adversely affect its business, financial situation and results of operations.

## 2. A number of exceptional measures taken by governments, central banks and regulators could be amended or terminated, and measures at the European level face implementation risks.

In response to the financial crisis, governments, central banks and regulators implemented measures intended to support financial institutions and sovereign states and thereby stabilise financial markets. Central banks took measures to facilitate financial institutions' access to liquidity, in particular by lowering interest rates to historic lows for a prolonged period. Various central banks decided to substantially increase the amount and duration of liquidity provided to banks, relax collateral requirements and, in some cases, implement "non-conventional" measures to inject substantial liquidity into the financial system, including direct market purchases of government bonds, corporate bonds, and mortgage-backed securities. These central banks may decide, acting alone or in concert, to tighten their policies, which could substantially and abruptly decrease the flow of liquidity in the financial system and influence the level of interest rates. In the United States, the Fed began raising its key interest rate in December 2015, and the market is now focusing on the pace of these rate increases and the potential monetary policy response to the budgetary and fiscal policy pursued by the new US Presidential administration of Donald Trump. Such changes in monetary policy, and concerns about their potential impact, could increase volatility in the financial markets and push US interest rates significantly higher. Given the uncertainty of the strength of global and US economic growth, such changes could have a significant adverse effect on financial institutions and, hence, on the Group's business, financial situation and results of operations.

In the Eurozone, since June 2014 the European Central Bank ("ECB") has lowered its key interest rates (including negative interest rates for deposit facilities), launched two Targeted Longer-Term Refinancing Operations ("TLTRO") and introduced and strengthened various asset purchase programmes (asset-backed securities - "ABS", covered bonds, sovereign bonds and, since 2016, corporate bonds. In December 2016, the ECB announced that the monthly amount of its asset purchases will be lowered to EUR 60 billion per month as from April 2017, compared to EUR 80 billion per month since April 2016, and that these asset purchases will be extended until at least December 2017. In spite of all these measures, a resurgence of financial tension in certain Eurozone member states cannot be ruled out, which could result in national policies restricting cross-border capital flows.

### 3. The Group's results may be affected by regional market exposures.

The Group's results are significantly exposed to economic, financial and political conditions in the principal markets in which it operates (namely France, other European Union countries and the United States). In France, the Group's principal market, recovery in growth and low interest rates have resulted in an upturn in the housing market, but a potential relapse of the activity in this area could have a material adverse impact on the Group's business, resulting in decreased demand for loans, higher rates of non-performing loans and decreased asset values. In the other European Union countries, a slowdown or halt of the current economic recovery, for instance following the effective exit of the United Kingdom from the European Union ("Brexit"), could result in increased loan losses or higher levels of provisioning.

The Group is involved in commercial banking and investment banking operations in emerging markets, in particular in Russia and other Central and Eastern European countries as well as in North Africa. Capital markets 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. It is likely that high levels of uncertainty will persist in relation to these markets and therefore the related risk. Unfavourable economic or political developments affecting these markets could have a material adverse effect on the business, results and financial position of the Group.

This is notably true in Russia. As a result of the Ukraine crisis, since March 2014 the United States, the European Union and other countries and international organisations have imposed several rounds of sanctions on Russian individuals and corporates. These sanctions, combined with the substantial decline in global oil prices, have adversely impacted the value of the rouble, as well as financing conditions and economic activity in Russia. There is a risk of further adverse developments in the event of increased geopolitical tensions and/or additional sanctions from Western countries and/or Russia, as well as in the event of a further drop in oil prices.

### 4 The Group operates in highly competitive industries, including in its home market.

The Group is subject to intense competition in the global and local markets in which it operates. On a global level, it competes with its peers principally in its core businesses (French Retail Banking, International Retail Banking and Financial Services, Global Banking and Investor Solutions, and Corporate Divisions). In local markets, including France, the Group faces substantial competition from locallyestablished banks, financial institutions, businesses providing financial and other services and, in some instances, governmental agencies. This competition exists in all of the Group's lines of business.

In France, the presence of major domestic competitors in the banking and financial services sector, as well as new market competitors (such as online retail banking and financial services providers), has increased competition for virtually all of the Group's products and services. The French market is a mature market and one in which the Group holds significant market share in most of its lines of business. Its financial situation and results of operations may be adversely affected if it is unable to maintain or increase its market share in key lines of business. The Group also faces competition from local participants in other geographic markets in which it has a significant presence. Gradually, certain sectors of the financial services industry have become more concentrated, as institutions offering a broad range of financial services have been acquired by or merged into other firms, or have declared bankruptcy. Such changes could result in the Group's remaining competitors benefiting from greater capital resources or other advantages, such as the ability to offer a broader range of products and services or greater geographic diversity. As a result of all these factors, and competitors' efforts to increase market share by reducing prices, the Group has experienced pricing pressures in the past, and may face similar pressures in the future. Competition on a global level, as well as on a local level in France and in other key markets, could have a material adverse effect on the Group's business, results of operations and financial situation.

### 5. Reputational damage could harm the Group's competitive position.

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 (supervisors, suppliers, etc.). Its reputation could be harmed by events attributable to it, flaws in its control measures, non-compliance with its commitments or strategic decisions (business activities, risk appetite, etc.), as well as by events and actions of others outside its control. Negative comments concerning the Group, whether legitimate or not, could have adverse effects on its business and its competitive position.

The Group's reputation could be adversely affected by a weakness in its internal control measures (operational risk, regulatory risk, credit risk, etc.) or following misconduct by employees such as with respect to clients (non-compliance with consumer protection rules) or by issues affecting market integrity (market abuse and conflicts of interest). The Group's reputation could also be affected by external fraud. Similarly, reputational issues could also result from a lack of transparency, communication errors or a restatement of, or corrections to, its financial results. The impact of such events can vary depending on the context and whether they become the focus of extensive media reports. Reputational damage could translate into a loss of business or investor confidence or a loss of clients (and prospects) that could have a material adverse effect on the Group's results of operations and financial position or on its ability to attract and retain employees.

## 6. The Group depends on access to financing and other sources of liquidity, which may be restricted for reasons beyond its control.

The ability to access short-term and long-term funding is essential to the Group's businesses. Societe Generale funds itself on an unsecured basis, by accepting deposits, issuing long-term debt, promissory notes and commercial paper, and obtaining bank loans or lines of credit. The Group also seeks to finance many of its assets on a secured basis, including by entering into repurchase agreements. If the Group is unable to access secured or unsecured debt markets on terms it considers acceptable 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 (because, for example, competitors raise the interest rates that they are willing to pay to depositors, and accordingly, customers move their deposits elsewhere), the Group may be forced to turn to more expensive funding sources, which would reduce the Group's net interest margin and results.

The Group's liquidity could also be adversely affected by factors the Group can neither control nor anticipate, such as general market disruptions, operational difficulties affecting third parties, negative views about the financial services industry in general, or the Group's short-term or long-term financial prospects, as well as changes in credit ratings or even market participants' perception of the Group or other financial institutions.

The Group's credit ratings can have a significant impact on the Group's access to funding and also on certain trading revenues. In connection with certain OTC trading agreements

and other securities agreements, the Group may be required to provide additional collateral to certain counterparties in the event of a credit rating downgrade. Rating agencies monitor in particular issuer-specific factors, such as governance, the level and quality of earnings, capital adequacy, funding, liquidity, risk appetite and management, asset quality, strategic direction, business mix and liability structure. Additionally, they take into account the regulatory and legislative context, as well as the macro-economic environment in which the bank operates. Therefore, a deterioration in any of the above factors may lead to a ratings downgrade for the Group or other players in the European banking industry.

Lenders have the right to accelerate some of the Group's debts upon the occurrence of certain events, including the Group's failure to obtain the necessary collateral following a downgrade of its credit rating below a certain threshold, and other events of default set out in the terms of such indebtedness. If the relevant lenders declare all amounts outstanding due and payable as a result of a default, the Group may be unable to find sufficient alternative financing on acceptable terms, or at all, and the Group's assets might not be sufficient to repay its outstanding indebtedness in full.

Moreover, the Group's ability to access capital markets and the cost of its long-term unsecured funding are directly related to its credit spreads in both the bond and credit derivatives markets, which the Group can neither control nor anticipate. Liquidity constraints may have a material adverse effect on the Group's business, financial situation, results of operations and ability to meet its obligations to its counterparties.

## 7. The protracted decline of financial markets or reduced liquidity in such markets may make it harder to sell assets and could lead to material losses.

In many of the Group's businesses, a protracted financial market decline, particularly in asset prices, could reduce the level of activity in the markets involved or reduce their liquidity. These developments could lead to material losses if the Group is not able to close out deteriorating positions in a timely way or adjust the hedge of its positions. This is especially true for the assets the Group holds for which the markets are relatively illiquid by nature. Assets that are not traded in regulated markets or other public trading platforms, such as derivatives contracts between banks, are valued based on the Group's internal models rather than on their market value. Monitoring or anticipating the deterioration of prices of assets like these is difficult and could lead to losses that the Group did not anticipate.

The continuation of low interest rates and accommodative monetary policy could cause certain participants in the financial markets seeking yield to engage in new behaviours, resulting in lengthened maturities, greater products complexity, the emergence of new market practices, etc. This context could reduce the liquidity of the financial markets in stress periods and increase the risk of dislocation or a flash crash, which could lead to losses or the impairment of assets owned by the Group.

## 8. The volatility of the financial markets may cause the Group to suffer significant losses on its trading and investment activities.

The volatility of the financial markets could adversely affect the Group's trading and investment positions in the debt, currency, commodity and equity markets, as well as its positions in private equity, property and other investments. Severe market disruptions and extreme market volatility have occurred in recent years and may occur again in the future, which could result in significant losses for the Group's capital 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.

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, if significant, could have a material adverse effect on the Group's results of operations and financial situation.

### 9. Changes in interest rates may adversely affect the Group's banking and asset management businesses.

The share of the Group's performance arising from interest income is influenced by changes and fluctuations in interest rates in Europe and in the other markets in which it operates. Interest rate sensitivity refers to the relationship between changes in market interest rates and changes in net interest margins and balance sheet values. Any mismatch between interest owed by the Group and interest due to it (in the absence of adequate hedging) could affect the Group's results of operations.

### 10. Fluctuations in exchange rates could adversely affect the Group's results of operations.

The Group's main operating currency is the euro. However, a significant portion of the Group's business is carried out in currencies other than the euro, such as the US dollar, the British pound sterling, the Japanese yen, the Czech koruna, the Romanian leu and the Russian rouble. The Group is exposed to exchange rate movements to the extent its revenues and expenses or its assets and liabilities are recorded in different currencies. Because the Group publishes its consolidated financial statements in euros, which is the currency of most of its liabilities, it is also subject to conversion risk in the preparation of its financial statements. Fluctuations in the exchange rate for these currencies against the euro may have a negative impact on the Group's consolidated results of operations, financial position and cash flows, despite any hedges that may be implemented by the Group to limit its foreign exchange exposure. Exchange rate fluctuations may also affect the value (denominated in euros) of the Group's investments in its subsidiaries outside the Eurozone.

## 11. 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 significant effect on the Group's businesses.

The Group is subject to extensive regulation and supervision in all jurisdictions in which it operates. The rules applicable to banks seek principally to limit their risk exposure, preserve their stability and financial solidity and protect clients, depositors, creditors and investors. The rules applicable to financial services providers govern, among other things, the sale, placement and marketing of financial instruments. The banking entities of the Group must also comply with requirements as to capital adequacy and liquidity in the countries in which they operate. Compliance with these rules and regulations requires significant resources. Non-compliance with applicable laws and regulations could lead to fines, damage to the Group's reputation, forced suspension of its operations or the withdrawal of operating licences.

Since the onset of the financial crisis, a variety of measures have been proposed, discussed and adopted by numerous national and international legislative and regulatory bodies, as well as other entities. Certain of these measures have already been implemented, while others are still under discussion. It therefore remains difficult to accurately estimate the future impacts or, in some cases, the likely consequences of these measures. In particular, the Basel 3 reforms are being implemented in the European Union through the Capital Requirements Regulation ("CRR") and Capital Requirements Directive 4 ("CRD4") which came into effect on 1st January 2014, with certain requirements being phased in over a period of time, up until 2019 or even later. Basel 3 is an international regulatory framework to strengthen capital and liquidity requirements with the goal of promoting a more resilient banking sector. Recommendations and measures addressing systemic risk exposure of global banks, including additional loss absorbency requirements, have been adopted by the Basel Committee and the Financial Stability Board ("FSB"), which was established following the G20 London summit in 2009. Societe Generale, among other global banks, has been named by the FSB as a "systemically important bank" ("G-SIB") and as a result will be subject to additional capital buffer requirements.

In France, Act No. 2013-672 dated 26th July 2013 on the separation and regulation of banking activities (as amended by Ordinance No. 2014-158 dated 20th February 2014 stipulating various measures to align French legislation with EU financial law) (the "Banking Law") mandates the separation of certain market activities performed by significant credit institutions when such activities are considered "speculative" (i.e. those deemed not necessary for financing of the economy). Unless an exception applies under the law (such as market making, treasury management, etc.), this obligation covers all banks' proprietary trading. In accordance with the Banking Law, the Group has segregated the relevant activities in a special subsidiary since 1st July 2015.

Ordinance No. 2015-1024 dated 20th August 2015 stipulating various measures to align French legislation with EU financial law (the "Ordinance") amended the provisions of the French Monetary and Financial Code (Code monétaire et financier) to implement into French law Directive 2014/59/EU of 15th May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms (the "BRRD"). Many of the provisions contained in the Banking Law were already similar in effect to the provisions of the Ordinance. Decree No. 2015-1160 dated 17th September 2015 and three orders dated 11th September 2015 regarding (i) recovery planning, (ii) resolution planning and (iii) criteria to assess the resolvability for institutions or groups, were published on 20th September 2015 to supplement the provisions of the Ordinance implementing the BRRD into French law.

The Ordinance requires that credit institutions subject to the direct supervision of the ECB (such as Societe Generale) and credit institutions and investment firms that represent a significant share of the financial system, draw up and submit to the ECB a recovery plan providing for measures to be taken by such institutions to restore their financial position following a significant deterioration of the same. The Ordinance expands the powers of the ACPR over institutions under resolution proceedings, in particular by allowing business disposals, the establishment of a bridge institution, the transfer of their assets to an asset management vehicle or the write-down and conversion or amendment of the terms (including changes to the maturity and/or interest payable and/or orders for temporary suspension of payments) of their capital instruments and eligible liabilities (referred to as the bail-in tool). These reforms could have a significant impact on the Group and its structure and the value of its equity and debt securities.

Regulation (EU) No. 806/2014 of 15th July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund created the Single Resolution Board (the SRB"). Since 1st January 2015, the SRB has had the authority to collect information and cooperate with the ACPR for resolution planning purposes. As from 1st January 2016, the resolution powers of the ACPR have been overridden by those of the SRB within the framework of the Single Resolution Mechanism. The entry into force of such mechanism could impact the Group and its structure in ways that cannot currently be estimated.

Since November 2014, Societe Generale and all other major financial institutions in the Eurozone have been subject to the supervision of the ECB as part of the implementation of the single supervisory mechanism. As set out above, Societe Generale has also been subject to the Single Resolution Mechanism since January 2016. The full impact of this new supervisory structure on the Group cannot yet be fully evaluated.

The MREL ratio ("Minimum Requirement for own funds and Eligible Liabilities") is defined in the BRRD and has been implemented into French law by the Ordinance. It entered into force on 1<sup>st</sup> January 2016. The MREL ratio is a minimum requirement for own funds and eligible liabilities that are available to absorb losses in the event of resolution. This requirement is calculated as the amount of own funds and eligible liabilities expressed as a percentage of the institution's total liabilities and own funds.

The TLAC ratio ("Total Loss Absorbing Capacity") has been developed by the FSB at the request of the G20. In November 2015, the FSB finalised its "Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution", including the TLAC Term Sheet. It introduced a new international standard for external and internal TLAC. The final Term Sheet, published on 9<sup>th</sup> November 2015 and approved by the G20 Leaders in Antalya, provides for the following TLAC principles, which will form the new international standard for G-SIBs:

(i) G-SIBs may be required to meet the TLAC ratio requirement alongside the minimum regulatory requirements set out in the Basel 3 framework. In particular, G-SIBs may be required to meet a minimum TLAC requirement of at least 16%, in addition to the Basel 3 regulatory capital buffers, of the resolution group's risk-weighted assets (TLAC RWA Minimum) as from 1<sup>st</sup> January 2019. As from 1<sup>st</sup> January 2022, the TLAC RWA Minimum will be at least 18%. Minimum TLAC must also be at least 6% of the Basel 3 leverage ratio denominator (TLAC Leverage Ratio Exposure Minimum) as from 1<sup>st</sup> January 2019, and at least 6.75% as from 1<sup>st</sup> January 2022. Home authorities may apply additional firm-specific requirements above these minimum standards.

(ii) The Term Sheet determines the core features for TLACeligible external instruments. TLAC instruments must be subordinated (structurally, contractually or statutorily) to operational liabilities, except for EU banks which will be allowed to include a limited amount of senior debt (2.5% of RWA in 2019, 3.5% of RWA in 2022) subject to regulatory approval. TLAC instruments must have a remaining maturity of at least one year. Insured deposits, sight or short-term deposits, derivatives and structured notes are excluded.

(iii) In order to reduce the risk of contagion, G-SIBs may be required to deduct exposures to eligible external TLAC instruments and liabilities issued by other G-SIBs from their own TLAC position. The impact of the MREL and TLAC ratios on the Group and its structure cannot be currently fully estimated, but the Group's financial position and cost of funding could be materially affected.

The US Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") provides a general framework of important financial regulation reforms to enhance banking supervision and regulation and contribute to financial stability. The Dodd-Frank Act and other similar post-financialcrisis regulations implemented in the US have increased costs, restricted business and resulted in greater regulatory supervision, as well as an increased risk of the introduction of additional measures adversely affecting banks. The Dodd-Frank Act has also provided the US market regulators, mainly the CFTC and the SEC, with enhanced regulatory and jurisdictional authority over Societe Generale, and subjected the Group to additional control and monitoring measures.

The Dodd-Frank Act also provides for new measures enhancing systemic risk oversight, prudential norms for banks, the orderly resolution of failing systemically-important financial institutions, regulation of over-the-counter derivatives and consumer and investor protection, as well as regulating the ability of banking organisations and their affiliates in relation to proprietary trading activities and certain transactions involving hedge funds and private equity funds.

Although certain rules and regulations are still in draft form, yet to be implemented or subject to extended transition periods, the majority of the rules have already been finalised and have resulted or will result in additional costs as well as the imposition of certain limitations on the Group's activities. The new US Presidential administration has expressed different policy goals and could implement alternative financial regulations, although the impact of any such differences remains unknown for the time being. Such new policies and any proposed new regulations or legislation, once adopted, could affect the activities of the Group and/or the value and liquidity of securities issued by Societe Generale.

The European Market Infrastructure Regulation ("EMIR") published in 2012 places new constraints on derivatives market participants in order to improve the stability and transparency of this market. Specifically, EMIR requires these participants to use clearing houses for products deemed sufficiently liquid and standardised, the reporting of all derivative product transactions to a trade repository, and the implementation of risk mitigation procedures (e.g. exchange of collateral) for OTC derivatives not cleared by clearing houses. Some of these measures are already in effect (e.g. mandatory central clearing for certain interest rate and credit derivatives), while others are expected to come into force in 2017 (e.g. exchange of initial margins and variation margins for uncleared transactions), making it difficult to accurately estimate their impact. Initial and variation margins exchange requirements involve extensive collateral agreements' negotiations. In addition, Regulation (EU) 2015/2365 of 25th November 2015 on transparency of securities financing transactions and of reuse was published in the Official Journal of the European Union on 23rd December 2015. It constitutes the counterpart of EMIR for certain obligations, including the reporting requirement on securities financing to trade repositories. It also includes a key provision on the obligation to provide information to counterparties regarding the risk of reuse of collateral received in these transactions. The first stage of initial margins exchange requirements under the Dodd-Frank Act, relating to over-the-counter uncleared derivatives, entered into effect on 1<sup>st</sup> September 2016.

In January 2015, the European Banking Authority ("EBA") published the final draft Regulatory Technical Standards ("RTS") laying down the requirements related to prudent valuation. Even

though a prudent valuation of fair value assets was already specified in CRD3, the RTS implement uniform prudent valuation standards across Europe. The Additional Valuation Adjustments ("AVAs") are defined as the difference between the prudent valuation and the accounting fair value

They are deducted from "Common Equity Tier 1 Capital" and therefore might affect the bank's capital adequacy ratio.

Lastly, additional reforms are being considered that seek to enhance the harmonisation of the regulatory framework and reduce variability in the measurement of Risk Weighted Assets ("RWA") across banks. In particular, the final text on the reform of internally-modelled and standardised approaches for market risk (*Minimum capital requirements for market risk*) was published in January 2016. Its implementation via the CRR2 framework is ongoing at the European level and the exact timeline has not been defined yet. A two-year implementation period would be granted to the banks after the date of publication in the Official Journal. Banks anticipate reporting under the new standards as from the end of 2020 or the beginning of 2021

### 12. The Group is exposed to counterparty and concentration risks.

The Group is exposed to credit risk with respect to numerous counterparties in the ordinary course of its trading, lending, deposit-taking, clearing, settlement and other activities. These counterparties include, among others, institutional clients, brokers and dealers, commercial and investment banks, corporates, clearing houses and sovereign states. The Group may realise losses if a counterparty defaults on its obligations and the collateral that it holds does not represent a value equal to, or is liquidated at prices not sufficient to recover the full amount of, the loan or derivative exposure it is intended to cover. Many of the Group's hedging and other risk management strategies also involve transactions with financial services counterparties. Default or insolvency on the part of these counterparties may impair the effectiveness of the Group's hedging and other risk management strategies, which could in turn materially adversely affect its business, results of operations and financial situation. Regarding clearing houses, regulators have encouraged or imposed the mandatory netting of certain over-the-counter traded financial instruments following the financial crisis, which has increased the exposure of the Group and other financial market participants to these counterparties: the default of any one of them could significantly impact the Group.

The Group may also have concentrated exposure to a particular counterparty, borrower or issuer (including sovereign issuers), or to a particular country or industry. A ratings downgrade, default or insolvency affecting such a counterparty, or a deterioration of economic conditions in such a country or industry, could have a particularly adverse effect on the Group's business, results of operations and financial situation. The systems the Group uses to limit and monitor the level of its credit exposure to individual entities, industries and countries may prove ineffective in preventing concentration of credit risk. Such a concentration of risk could result in losses for the Group, even when economic and market conditions are generally favourable for its competitors.

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

The Group's ability to engage in funding, investment and derivative transactions could be adversely affected by the soundness of other financial institutions or market participants. Financial services institutions are interrelated as a result of trading, clearing, counterparty, funding and other relationships. As a result, defaults by, or even rumours or questions about, one or more financial services institutions, or a loss of confidence in the financial services industry generally, may result in market-wide liquidity scarcity and could lead to further losses or defaults. The Group has exposure to many counterparties in the financial industry, directly and indirectly, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional clients with which it regularly executes transactions. Many of these transactions expose the Group to credit risk in the event of default by counterparties or clients. It should be noted that the number of cleared transactions is increasing and will continue to do so, thereby increasing our exposure to clearing houses while reducing our bilateral positions.

### 14. The Group's hedging strategies may not prevent all risk of losses.

If any of the instruments or strategies that the Group uses to hedge its exposure to various types of risk in its businesses is not effective, it may incur significant losses. Many of its strategies are based on historical trading patterns and correlations that may not be appropriate in the future. For example, if the Group holds a long position in an asset, it may hedge that position by taking a short position in another asset whose value has historically moved in an offsetting direction. However, the hedge may cover only part of its exposure to the long position, and the strategies used may not protect against all future risks or may not be fully effective in mitigating its risk exposure in all market environments or against all types of risk in the future. Unexpected market developments may also reduce the effectiveness of the Group's hedging strategies.

## 15. The Group's results of operations and financial situation could be adversely affected by a significant increase in new provisions or by inadequate provisioning for loan losses.

The Group regularly sets aside provisions for loan losses in connection with its lending activities. Its overall level of loan loss provisions, recorded as "cost of risk" in its income statement, is based on its assessment of the recoverability of the loans in question. This assessment relies on an analysis of various factors, including prior loss experience, the amount and type of lending being granted, industry standards, past due loans, certain economic conditions and the amount and type of any guarantees and collateral. Notwithstanding the care with which the Group carries out such assessments, it has had to increase its provisions for loan losses in the past and may have to substantially increase its provisions in the future following an increase in defaults or for other reasons. A significant increase in loan loss provisions, a substantial change in the Group's estimate of its risk of loss with respect to loans for which no provision has been recorded, or the occurrence of loan losses in excess of its provisions, could have a material adverse effect on its results of operations and financial situation.

## 16. The Group relies on assumptions and estimates which, if incorrect, could have a significant impact on its financial statements.

When applying the IFRS accounting principles disclosed in the Financial Information (Chapter 6 of this Registration Document) and for the purpose of preparing the Group's consolidated financial statements, the Group's Management makes assumptions and estimates that may have an impact on figures recorded in the income statement, on the valuation of assets and liabilities in the balance sheet, and on information disclosed in the notes to the consolidated financial statements.

In order to make these assumptions and estimates, the Group's Management exercises its judgement and uses information available at the date of preparation of the consolidated financial statements. By nature, valuations based on estimates involve risks and uncertainties relating to their occurrence in the future. Actual future results may therefore differ from these estimates, which could have a significant impact on the Group's financial statements.

The use of estimates principally relates to the following valuations:

- fair value of financial instruments that are not quoted on an active market, as presented in the balance sheet or the notes to the financial statements;
- the amount of impairment of financial assets (loans and receivables, available-for-sale financial assets, held-tomaturity financial assets), lease financing and similar agreements, tangible or intangible fixed assets and goodwill;
- provisions recognised under liabilities (including provisions for litigation in a complex legal context and provisions for employee benefits), underwriting reserves of insurance companies, and profit-sharing;
- the amount of deferred tax assets recognised in the balance sheet;
- initial value of goodwill determined for each business combination; and
- in the event of the loss of control over a consolidated subsidiary, fair value of the stake potentially retained by the Group in such entity, where applicable.
- 17. The Group is exposed to legal risks that could negatively affect its financial situation or results of operations.

The Group and certain of its former and current representatives may be involved in various types of litigation including civil, administrative, fiscal, 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 as well as for other financial institutions, of losses or reputational harm deriving from litigation and other proceedings. Such proceedings or regulatory enforcement actions could also lead to civil. administrative, tax or criminal penalties that would adversely affect the Group's business, financial situation and results of operations. For a description of the most significant ongoing proceedings, see "Compliance, reputational and legal risks". 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.

In preparing the Group's financial statements, the Group's Management makes estimates regarding the outcome of civil, administrative, fiscal, 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. Should such estimates prove inaccurate or the provisions set aside by the Group to cover such risks inadequate, the Group's financial situation or results of operations could be materially and adversely affected.

#### If the Group makes an acquisition, it may be unable to manage the integration process in a cost-effective manner or achieve the expected benefits.

The selection of an acquisition target is carried out by the Group following a careful analysis of the businesses or assets to be acquired. However, such analyses often cannot be exhaustive due to various factors. As a result, certain acquired businesses may include undesirable assets or expose the Group to increased risks, particularly if the Group was unable to conduct full and comprehensive due diligence prior to the acquisitions.

The successful integration of a new business typically requires effectively coordinating business development and marketing initiatives, retaining key managers, recruitment and training, and consolidating information technology systems. These tasks may prove more difficult to implement than anticipated, or require more management time and resources than expected. Similarly, the Group may experience higher integration costs and lower savings or earn lower revenues than expected. The pace and degree of synergy building is also uncertain.

#### 19. The Group's risk management system may not be effective and may expose the Group to unidentified or unanticipated risks, which could lead to significant losses.

The Group has devoted significant resources to develop its risk management policies, procedures and assessment methods, and intends to continue to do so in the future. Nonetheless, its risk management techniques and strategies may not be fully effective in mitigating its risk exposure in all economic market environments or against all types of risk, including risks that it fails to identify or anticipate. Some of its qualitative tools and metrics for managing risks are based upon observed historical market behaviour. The Group applies statistical and other tools to these observations in order to assess its risk exposures. These tools and metrics may fail to predict accurate future risk exposures that arise from factors the Group did not anticipate or correctly evaluate in its statistical models. Failure to anticipate or manage these risks could have a material adverse effect on the Group's business, financial situation and results of operations.

## 20. Operational failure, termination or capacity constraints affecting institutions the Group does business with, or failure or breach of the Group's information technology systems, could result in losses.

The Group is exposed to the risk of operational failure, termination or capacity constraints of third parties, including clients, financial intermediaries that it uses to facilitate cash settlement or securities transactions (such as clearing agents, exchanges and clearing houses), and other market participants. An increasing number of derivative transactions are now required to be cleared on exchanges, or will be in the near future, which has increased the Group's exposure to these risks, and could affect its ability to find adequate and cost-effective alternatives in the event of any such failure, termination or constraint.

The interconnectivity of multiple financial institutions with clearing agents, exchanges and clearing houses, 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 materially impact the Group's ability to conduct business. 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. As the Group becomes more interconnected with its clients, it also faces the risk of operational failure with respect to its clients' information technology and communication systems. Any failure, termination or constraint could adversely affect its ability to effect transactions, provide customer service, manage its exposure to risk or expand its businesses or result in financial losses, liability towards its clients, impairment of its liquidity, disruption of its businesses, regulatory intervention or reputational damage.

In addition, an increasing number of companies, including financial institutions, have experienced intrusion attempts or even breaches of their information technology security, some of which have involved sophisticated and targeted attacks on their computer networks and resulted in loss, theft or disclosure of confidential data. Because the techniques used to obtain unauthorised access, disable or degrade service or sabotage information systems change frequently, and often are not recognised until launched against a target, the Group may be unable to anticipate these techniques or to implement effective countermeasures in a timely manner. Similarly, technical internal and external fraud is fluid and protean, and closely follows the technological evolution of financial activities and customer behaviour, leading fraudsters to regularly develop new attack techniques. Such actions could have a material adverse effect on the Group's business and result in operational losses.

The Group relies heavily on communication and information systems to conduct its business. Any failure, interruption or breach in security of these systems, even if only brief and temporary, could result in business interruptions and lead to additional costs related to information retrieval and verification, reputational harm and a potential loss of business. Any failure, interruption or security breach of its information systems could have a material adverse effect on the Group's business, results of operations and financial situation.

#### 21. The Group may incur losses as a result of unforeseen or catastrophic events, including the emergence of a pandemic, terrorist attacks or natural disasters.

The occurrence of unforeseen or catastrophic events, including the emergence of a pandemic or other widespread health crisis (or concerns over the possibility of such crisis), terrorist attacks or natural disasters, could create economic and financial disruptions, lead to operational difficulties (including travel limitations or relocation of affected employees) that could impair the Group's ability to manage its businesses, and expose its insurance activities to significant losses and increased costs (such as re-insurance premiums).

#### 22. The Group may generate lower revenues from brokerage and other commission and fee-based businesses during market downturns.

During the market downturn, the Group experienced a decline in the volume of transactions executed for its clients, resulting in lower revenues from this activity. There is no guarantee that the Group will not experience a similar trend in future market downturns, which may occur periodically and unexpectedly. Furthermore, changes in applicable regulations, such as the adoption of a financial transaction tax, could also impact the volume of transactions that the

Group executes for its clients, resulting in lower revenues from these activities. In addition, because the fees that the Group charges for managing its clients' portfolios are in many cases based on the value or performance of the portfolios in question, a market downturn that reduces the value of its clients' portfolios or increases the amount of withdrawals would reduce the revenues the Group generates from its asset management, custodial and private banking businesses

#### 23. The Group's ability to attract and retain qualified employees is critical to the success of its business, and failure to do so may materially adversely affect its performance.

Societe Generale's employees are one of its most important resources, and industry competition for qualified personnel is intense. In order to attract and retain talented employees, the Group must offer career paths, training and development opportunities and compensation levels in line with its competitors and market practices. If the Group were unable to continue to attract highly-qualified employees, its performance, especially its competitive position and client satisfaction, could be materially adversely affected. Besides, the financial industry in Europe will continue to experience even more stringent regulation of employee compensation, including rules related to bonuses and other incentive-based compensation, and/or deferred payments for certain types of compensation, and the Group, like all participants in the financial industry, will need to adapt to this changing environment in order to attract and retain qualified employees.

In 2014, the CRD4 Directive, which applies to banks in the European Economic Area, introduced a ceiling on the variable component of compensation in relation to the fixed component for certain personnel categories. This regulatory constraint could cause a relative increase in the fixed compensation in the Group in relation to its variable component based on risk-adjusted performance. This could lead to challenges in attracting and retaining key personnel and to an increase in the fixed cost base of the affected population, which could be detrimental to the competitive position and flexibility of the Group in terms of personnel costs.

## IN BRIEF

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

Evolution of CET1 capital + EUR 2.1 bn between 2015 and 2016

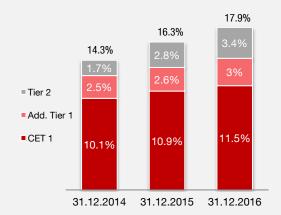
#### Evolution of total regulatory capital

+ EUR 5.4 bn between 2015 and 2016

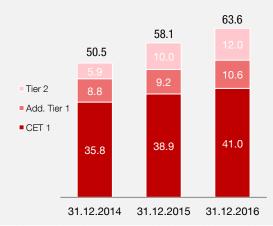
Fully-loaded CET1 ratio at end-2016

11.5%

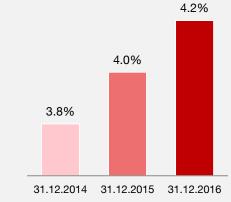
#### FULLY-LOADED SOLVENCY RATIOS (1)



#### **REGULATORY CAPITAL (IN EUR BN)**



#### LEVERAGE RATIO (1) (2) (TIER 1) (IN BN EUR)



(1) Fully-loaded ratios based on CRR/CRD4 rules as published on 26th June 2013, including Danish compromise for insurance.

(2) Fully-loaded based on CRR rules as adopted by the EU in October 2014 (Delegated Act).

## 3. CAPITAL MANAGEMENT AND ADEQUACY

#### 3.1. THE REGULATORY FRAMEWORK

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

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

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

In terms of capital, the main new measures introduced to strengthen banks' solvency were as follows:

- the complete revision and harmonisation of the definition of capital, particularly with the amendment of the deduction rules, the definition of a standardised Common Equity Tier 1 (or CET1) ratio, and new Tier 1 capital eligibility criteria for hybrid securities;
- new capital requirements for the counterparty risk of market transactions, to factor in the risk of a change in CVA (Credit Value Adjustment) and hedge exposures on the central counterparties (CCP);
- the set-up of capital buffers that can be mobilised to absorb losses in case of difficulties. The new rules require banks to create a conservation buffer and a countercyclical buffer to preserve their solvency in the event of adverse conditions. Moreover, an additional buffer is required for systemically important banks. As such, the Societe Generale Group, as a global systemically important bank (GSIB), has had its Common Equity Tier 1 ratio requirement increased by an additional 1%. Requirements related to capital buffers gradually entered into force as from 1<sup>st</sup> January 2016, for full application by January 2019;

- the set-up of restrictions on distributions, relating to dividends, AT1 instruments and variable remuneration;
- in addition to these measures, there will be measures to contain the size and consequently the use of excessive leverage. To this end, the Basel Committee defined a leverage ratio, for which the definitive regulations were published in January 2014, and included in the Commission's Delegated Regulation (EU) 2015/62. The leverage ratio compares the bank's Tier 1 capital to the balance sheet and off-balance sheet items, with restatements for derivatives and pensions. Banks have been obliged to publish this ratio since 2015.

From a regulatory perspective, the year 2016 was marked by the launch of the Basel 4 reform revamping the credit and operational risk frameworks. In early 2017, the GHOS (Group of Governors and Heads of Supervision) postponed indefinitely the meeting to endorse the Basel 4 package. Accordingly, the date of implementation of these provisions is still undetermined. Furthermore, on 23<sup>rd</sup> November 2016, the Commission published its draft text for CRR2/CRD 5. The majority of the provisions will come into force two years after the entry into force of CRR2. Given the Trilogue deadline, it will likely not be before 2019 at the earliest. The final provisions will only be known at the end of the European legislative process. As such, the texts may still undergo changes.

This reform aims to transpose into European law the Basel texts that have already been finalised:

- Leverage ratio: the minimum requirement of 3% Tier 1 is set, bearing in mind that any add-on for G-SIBs will result from a future standard introduced by the Basel Committee in 2017;
- Transposition of the Net Stable Funding Ratio (NSFR), large exposures, the standardised method for calculating the counterparty risk of derivatives, the reform of the market risk framework (Fundamental Review of the Trading Book – FRTB), and of the standard relating to interest rate risk in the banking book (Interest Rate Risk in the Banking Book – IRRBB);
- Inclusion in the Directive of the distinction between the Pillar 2 Requirement (P2R) and Pillar 2 Guidance (P2G) within the Pillar 2 framework.

Finally, the European Central Bank confirmed the level of additional capital requirements in respect of Pillar 2 (P2R or "Pillar 2 Requirement") which will come into force as from 1<sup>st</sup> January 2017. This level was set at 1.50% for Societe Generale. Taking into account the combined regulatory buffers (excluding the counter-cyclical buffer), the phased-in CET1 ratio would be 7.75% in 2017.

Detailed information on the GSIB requirements and other prudential information is available at the Group's website, www.societegenerale.com, under "Registration Document" and "Pillar 3".

Throughout 2016, the Societe Generale Group complied with the minimum ratio requirements applicable to its activities.

#### 3.2. SCOPE OF APPLICATION – PRUDENTIAL SCOPE

The Group's prudential reporting scope includes all fully and proportionally consolidated subsidiaries, with the exception of insurance subsidiaries, which are subject to separate capital supervision. Non-regulated subsidiaries outside of the scope of consolidation are subject to periodic reviews, at least annually. Any differences with respect to legal capital requirements are adequately provisioned in the Group's consolidated financial statements.

All of the Group's regulated subsidiaries comply with their prudential commitments on an individual basis.

#### TABLE 1: DIFFERENCE BETWEEN ACCOUNTING SCOPE AND PRUDENTIAL REPORTING SCOPE

Type of entity	Accounting treatment	Prudential treatment under CRR/CRD4
Subsidiaries with a financial activity	Full consolidation	Capital requirement based on the subsidiary's activities
Subsidiaries with an insurance activity	Full consolidation	Weighted equity value
Holdings, joint ventures with a financial activity by nature	Equity method	Weighted equity value

The following table provides a reconciliation of the consolidated balance sheet and the accounting balance sheet within the prudential scope. The amounts presented are accounting data and not a measure of risk-weighted assets, EAD or prudential capital. Prudential filters related to subsidiaries and holdings not associated with an insurance activity are grouped together on account of their non-material weight (<0.4%).

## TABLE 2: RECONCILIATION OF THE CONSOLIDATED BALANCE SHEET AND THE ACCOUNTING BALANCE SHEET

ASSETS at 31.12.2016 _(In EUR m)	Consolidated balance sheet	Adjustments linked to insurance <sup>(1)</sup>	Other adjustments linked to consolidation methods	Accounting balance sheet within the prudential scope	Cross ref. Table 6a, p47
Cash and amounts due from Central Banks	96,18	6 0	0	96,186	
Financial assets at fair value through profit and loss	514,71	5 (32,264)	48	482,499	
Hedging derivatives	18,10	0 (428)	0	17,672	
Available-for-sale assets	139,40	4 (75,302)	26	64,128	
Loans and advances to credit institutions	59,50	2 (7,342)	453	52,613	
of which subordinated loans to credit institutions	15	7 0	0	157	1
Loans and advances to clients	397,64	3 897	0	398,540	
Lease financing and equivalent transactions	28,858	3 0	0	28,858	
Revaluation of macro-hedged items	1,078	3 0	0	1,078	
Financial assets held to maturity	3,912	2 0	0	3,912	
Tax assets	6,421	I (37)	2	6,386	
of which deferred tax assets that rely on future profitability excluding those arising from temporary differences	1,547	7 0	658	2,205	2
of which deferred tax assets arising from temporary differences	3,783	3 0	(683)	3,100	3
Other assets	84,756	622)	(4)	84,130	
of which defined-benefit pension fund assets	59	9 0	0	59	4
Non-current assets held for sale	4,252	2 0	0	4,252	
Investments in subsidiaries and affiliates accounted for by the equity method	1,096	6 3,457	(125)	4,428	
Tangible and intangible assets	21,783	3 (664)	1	21,120	
of which intangible assets exclusive of leasing rights	1,717	7 0	(72)	1,645	5
Goodwill	4,535	5 0	4	4,539	5
TOTAL ASSETS	1,382,241	(112,305)	405	1,270,341	

<sup>1</sup> Restatement of subsidiaries excluded from the prudential reporting scope and reconsolidation of intragroup transactions related to its subsidiaries.

NB. The table 6a on page 47 provides detailed information on the creation of own funds and solvency ratios.

LIABILITIES at 31.12.2016 (In EUR m)	Consolidated balance sheet	Adjustments linked to insurance <sup>(1)</sup>	Other adjustments linked to consolidation methods	Accounting balance sheet within the prudential scope	Cross ref. Table 6a, p47
Central banks	5,23	38 0	0	5,238	
Liabilities at fair value through profit or loss	455,62	20 1,102	0	456,722	
Hedging derivatives	9,59	2 2	0	9,596	
Amounts owed to credit institutions	82,58	34 (1,310)	147	81,421	
Amounts owed to clients	421,00	2,017	0	423,019	
Debt securities	102,20	4,586	0	106,788	
Revaluation reserve of interest-rate-hedged portfolios	8,46	60 0	0	8,460	
Tax liabilities	1,44	4 (317)	11	1,138	
Other Liabilities	94,21	2 (5,002)	247	89,457	
Debts related to Non-current assets held for sale	3,61	2 0	0	3,612	
Technical provisions of insurance companies	112,77	7 (112,777)	0	0	
Provisions	5,68	7 (23)	0	5,664	
Subordinated debts	14,10	3 246	0	14,349	
of which redeemable subordinated notes including revaluation differences on hedging items	13,54	1 241	0	13,782	6
Total debts	1,316,53	5 (111,476)	405	1,205,464	
EQUITY					
Equity, Group share	61,95	3 0	0	61,953	
of which capital and related reserves	19,98	6 0	0	19,986	7
of which other capital instruments	9,68	0 0	0	9,680	8
of which retained earnings	4,09	6 0	0	4,096	9
of which accumulated other comprehensive income (including gains and losses accounted directly in equity)	24,31	7 0	0	24,317	10
of which net income	3,87	4 0	0	3,874	11
Minority interests	3,75	3 (829)	0	2,924	12
Total equity	65,70	6 (829)	0	64,877	
TOTAL LIABILITIES	1,382,24	1 (112,305)	405	1,270,341	

<sup>1</sup> Restatement of subsidiaries excluded from the prudential reporting scope and reconsolidation of intragroup transactions related to its subsidiaries.

ASSETS at 31.12.2015 _(In EUR m)	Consolidated balance A sheet	Adjustments linked to insurance <sup>(1)</sup>	Other adjustments linked to consolidation methods	Accounting balance sheet within the prudential scope	Cross ref. Table 6a, p47
Cash and amounts due from Central Banks	78,565	5 0	0	78,565	
Financial assets at fair value through profit and loss	519,333	3 (28,258)	42	491,117	
Hedging derivatives	16,538	3 (378)	0	16,160	
Available-for-sale assets	134,187	(72,328)	25	61,884	
Loans and advances to credit institutions	71,682	2 (7,530)	267	64,419	
of which subordinated loans to credit institutions	458	3 0	0	458	1
Loans and advances to clients	378,048	882	17	378,947	
Lease financing and equivalent transactions	27,204	0	0	27,204	
Revaluation of macro-hedged items	2,723	0	0	2,723	
Financial assets held to maturity	4.044	0	0	4.044	
Tax assets	7,367	(25)	2	7,344	
of which deferred tax assets that rely on future profitability excluding those arising from temporary differences	1,671	0	696	2,367	2
of which deferred tax assets arising from temporary differences	4.257	0	(699)	3.558	3
Other assets	69.398	(978)	18	68,438	
of which defined-benefit pension fund assets	32	0	0	32	4
Non-current assets held for sale	171	0	0	171	
Investments in subsidiaries and affiliates accounted for by the equity method	1,352		(130)	4,330	
Tangible and intangible assets	19,421	(649)	1	18,773	
of which intangible assets exclusive of leasing rights	1,511	0	(46)	1,465	5
Goodwill	4,358	0	5	4,363	5
TOTAL ASSETS	1,334,391	(106,154)	246	1,228,482	

<sup>1</sup> Restatement of subsidiaries excluded from the prudential reporting scope and reconsolidation of intragroup transactions related to its subsidiaries.

LIABILITIES at 31.12.2015 _(In EUR m)	Consolidated balance sheet	Adjustments linked to insurance <sup>(1)</sup>	Other adjustments linked to consolidation methods	Accounting balance sheet within the prudential scope	Cross ref. Table 6a, p47
Central banks	6,951	0	0	6,951	
Liabilities at fair value through profit or loss	454,981	1,412	0	456,393	
Hedging derivatives	9,533	2	0	9,535	
Amounts owed to credit institutions	95,452	(823)	61	94,690	
Amounts owed to clients	379,631	2,039	46	381,716	
Debt securities	106,412	4,415	0	110,827	
Revaluation reserve of interest-rate- hedged portfolios	8,055	0	0	8,055	
Tax liabilities	1,571	(528)	9	1,052	
Other Liabilities	83,083	(4,811)	131	78,403	
Debts related to Non-current assets held for sale	526	0	0	526	
Technical provisions of insurance companies	107,257	(107,257)	0	0	
Provisions	5,218	(22)	0	5,196	
Subordinated debts	13,046	245	0	13,291	
of which redeemable subordinated notes including revaluation differences on hedging items	12,488	240	0	12,728	6
	,		247		
	1,271,716	(105,328)	247	1,166,635	
EQUITY Equity, Group share			(1)		
of which capital and related reserves	59,037	0	(1)	59,036	7
	19,979	0	0	19,979	8
of which other capital instruments	8,772	0	0	8,772	9
of which retained earnings of which accumulated other	4,921	0	0	4,921	10
comprehensive income (including gains and losses accounted directly in equity)	21,364	0	(1)	21,363	10
of which net income	4,001	0	0	4,001	11
Minority interests	3,638	(826)	0	2,811	12
Total equity	62,675	(826)	(1)	61,848	
TOTAL LIABILITIES	1,334,391	(106,154)	246	1,228,482	

In accordance with provisions of article R 511-16-1 of the French Monetary and Financial Code, return on assets (i.e. Net Income divided by the total balance sheet per consolidated accounts) for Societe Generale stood at 0.31% in 2016 and 0.33% in 2015. On a prudential basis (fully loaded) the ratio was 0.33% in 2016 and 0.23% in 2015, calculated by dividing the Group Net Income reflected in Table 2 by the Total Balance Sheet for prudential purposes reflected in Table 2.

<sup>1</sup> Restatement of subsidiaries excluded from the prudential reporting scope and reconsolidation of intragroup transactions related to its subsidiaries.

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

### TABLE 3: SUBSIDIARIES OUTSIDE THE PRUDENTIAL REPORTING SCOPE

Company	Activiity	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
Genecar – Société Générale de Courtage d'Assurance et de Réassurance	Insurance	France
Inora Life LTD	Insurance	Ireland
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
SG Reinsurance Intermediary Brokerage, LLC	Insurance	USA
La Banque Postale Financement	Bank	France
SG Banque au Liban	Bank	Lebanon

Regulated financial subsidiaries and affiliates outside of Societe Generale's prudential consolidation scope are all in compliance with their respective solvency requirements. More generally, all regulated Group undertakings are subject to solvency requirements set by their respective regulators.

The supervising authority accepted that some Group entities may be exempt from the application of prudential requirements on an individual basis or, where applicable, on a sub-consolidated basis. Accordingly, 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 subsidiaries shall be carried out in compliance with capital and liquidity requirements applicable locally.

### 3.3. REGULATORY CAPITAL

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

### **Common Equity Tier 1 capital**

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

- ordinary shares (net of repurchased shares and treasury shares) and related share premium accounts;
- retained earnings;
- components of other comprehensive income;
- other reserves;
- minority interest limited by CRR/CRD4.

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

- estimated dividend payment;
- goodwill and intangible assets, net of associated deferred tax liabilities;
- unrealised capital gains and losses on cash flow hedging;
- 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, risk-weighted using the Internal Ratings Based (IRB) approach, and the sum of related value adjustments and collective impairment losses;
- expected loss on equity portfolio exposures;
- value adjustments resulting from the requirements of prudent valuation;
- securitisation exposures weighted at 1,250%, where these positions are not included in the calculation of total riskweighted exposures.

### 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;
- in addition, 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;
- 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 interest beyond the minimum T1 requirement in the entities concerned.

ssuance Date	Currency	lssue amount (in currency m)	First call date	Yield before the call date and frequency	Yield after the call date and frequency	Book value at E 31.12.2016	300k value at 31.12.2015
5-Apr07	USD	200 M	5-Apr17	3-months USD Libor + 0.75% annually	3-months USD Libor +	60	58
5-Apr07	USD	1 100 M	5-Apr17	5.922% semi- annually		766	742
19-DecC	07 EUR	600 M	19-Dec17	6.999% annually	Euribor 3 months +3.35% annually	468	468
16-Jun-08	3 GBP	700 M	16-Jun-18	8.875% annually	Libor 3 months +3.40% annually	590	689
7-Jul-08	EUR	100 M	7-Jul18	7.715% annually	Euribor 3 months + 3.70% annually	100	100
4-Sep09	e EUR	1 000 M	4-sept19	9.375% annually	Euribor 3 months + 8.9% annually	1,000	1,000
6-Sep13	USD	1 250 M	29-nov18	8.25% annually	Mid Swap Rate USD 5 years + 6.394%	1,186	1,148
18-Dec1	3 USD	1 750 M	18-Dec23	7.875% annually	Mid Swap Rate USD 5 years + 4.979%	1,660	1,607
7-Apr14	EUR	1 000 M	7-Apr21	6.75% annually	Mid Swap Rate USD 5 years + 5.538%	1,000	1,000
25-Jun-14	USD	1 500 M	27-Jan20	6% semi-annually	Mid Swap Rate USD 5 years + 4.067%	1,423	1,378
29-Sep-1	5 USD	1 250 M	29-sep25	8.000%	Mid Swap Rate USD 5 years + 5.873%	1,186	1,148
13-Sep-10	6 USD	1 500 M	13-sep21	7.375%	Mid Swap Rate USD 5 years + 6.238%	1,423	0
Total						10,862	9,338

### TABLE 4: TOTAL AMOUNT OF DEBT INSTRUMENTS ELIGIBLE FOR TIER 1 EQUITY

### **Tier 2 Capital**

Tier 2 capital includes:

- undated deeply subordinated notes;
- dated subordinated notes;
- any positive difference between (i) the sum of value adjustments and collective impairment losses on customer loans and receivables exposures, risk-weighted using the IRB approach and (ii) expected losses, up to 0.6% of the total credit risk-weighted assets using the IRB approach;
- value adjustments for general credit risk related to collective impairment losses on customer loans and receivables

exposures, risk-weighted using the standard approach, up to 1.25\% of the total credit risk-weighted assets.

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;
- share of non-controlling interest in excess of the minimum capital requirement in the entities concerned.

All capital instruments and their features are detailed online (www.societegenerale.com /Investors/Registration Document and Pillar 3).

### TABLE 5: CHANGES IN DEBT INSTRUMENTS ELIGIBLE FOR THE SOLVENCY CAPITAL REQUIREMENTS

	31.12.2015			Prudential supervision	-	
(In EUR m)	31.12.2015	Issues	Redemptions	valuation haircut	Others	31.12.2016
Debt instruments eligible for Tier 1	9,338	1,423	0	0	101	10,862
Debt instruments eligible for Tier 2	11,143	2,410	(27)	(620)	133	13,039
Total eligible debt instruments	20,481	3,833	(27)	(620)	234	23,901

### **Solvency ratio**

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

Since 1<sup>st</sup> January 2014, the new regulatory framework sets minimum requirements to be met for the CET1 ratio and the Tier 1 ratio. For 2015, the minimum requirement for CET1 was 4%, and that of Tier 1 5.5%, excluding the Pillar 2 requirement. The total equity requirement, including CET1, AT1 and Tier 2 equity, was set at 8%. In 2016, the minimum requirement for CET1 will be 4.5%, and that of Tier 1 6%.

In 2016, under Pillar 2, following the results of the Supervisory Review and Evaluation Process (SREP) performed by the European Central Bank (ECB), the Societe Generale Group is required to meet a Common Equity Tier 1 (CET1) ratio of 9.5% (phased-in ratio, including conservation buffer, but excluding countercyclical buffer). Accordingly, the Group's prudential capital requirement amounted to 9.75% at 1<sup>st</sup> January 2016. At 1<sup>st</sup> January 2017, the Common Equity Tier 1 (CET1) requirement applicable to the Societe Generale Group was set to 7.75% (excluding the countercyclical buffer). The G-SIB buffer required by the Financial Stability Board (FSB) to be applied on top of this SREP ratio is equal to 0.50% and will be increased by 0.25% per annum thereafter, ultimately reaching 1% in 2019.

The countercyclical buffer – just like the conservation buffers – plays a role in determining the overall buffer requirement. The countercyclical buffer rate is set by country. Each establishment calculates its countercyclical buffer requirement by measuring the average countercyclical buffer rate for each country, adjusted to take into account the relevant credit risk exposures in these countries. The countercyclical buffer rate, in force as of 1<sup>st</sup> January 2016, generally lies between 0% and 2.5% by country, with a transitional period where the rate is capped (0.625% in 2016, 1.25% in 2017 and 1.875% in 2018).

The countercyclical buffer requirement for the Societe Generale Group in 2016 is not material (cf. table 16 p. 53).

### TABLE 6: REGULATORY CAPITAL AND CRR/CRD4 SOLVENCY RATIOS - FULLY LOADED

(In EUR m)	31.12.2016	31.12.2015
Shareholders' equity (IFRS), Group share	61,953	59,037
Deeply subordinated notes	(10,663)	(9,552)
Perpetual subordinated notes	(297)	(366)
Consolidated shareholders' equity, Group share, net of deeply subordinated and perpetual subordinated notes	50,993	49,119
Non-controlling interests	2,623	2,487
Intangible assets	(1,626)	(1,443)
Goodwill	(4,709)	(4,533)
Proposed dividends (General Meeting of Shareholders) and interest expenses on deeply subordinated and perpetual subordinated notes	(1,950)	(1,764)
Deductions and regulatory adjustments	(4,394)	(5,000)
Common Equity Tier One Capital	40,937	38,865
Deeply subordinated notes and preferred shares	10,862	9,338
Other additional tier 1 capital	(113)	46
Additional Tier 1 deductions	(138)	(137)
Tier 1 Capital	51,548	48,112
Tier 2 instruments	13,039	11,143
Other tier 2 capital	374	278
Tier 2 deductions	(1,400)	(1,400)
Total regulatory capital	63,561	58,134
Total risk-weighted assets	355,478	356,725
Credit risk-weighted assets	294,220	293,543
Market risk-weighted assets	16,873	19,328
Operational risk-weighted assets	44,385	43,854
Solvency ratios		
Common Equity Tier 1 Ratio	11.5%	10.9%
Tier 1 Ratio	14.5%	13.5%
Total capital adequacy ratio	17.9%	16.3%

The phased-in CRR/CRD4 solvency ratio at 31<sup>st</sup> December 2016 totalled 11.8% in Common Equity Tier 1 (11.4% at 31<sup>st</sup> December 2015), 14.8% in Tier 1 (14.0% at 31<sup>st</sup> December 2015) for a total ratio of 18.2% (16.8% at 31<sup>st</sup> December 2015). Shareholders' equity (Group share) at 31<sup>st</sup> December 2016 totalled EUR 62 billion (compared to EUR 59 billion at 31<sup>st</sup> December 2015).

After taking into account non-controlling interests and regulatory adjustments, CET1 regulatory capital was EUR 40.9 billion at 31<sup>st</sup> December 2016, vs. EUR 38.9 billion at 31<sup>st</sup> December 2015.

The table below shows the key factors in this change:

### TABLE 7: REGULATORY DEDUCTIONS AND ADJUSTMENTS UNDER CRR/CRD4

_(In EUR m)	31.12.2016	31.12.2015
Unrecognised minority interests	(1,102)	(1,131)
Deferred tax assets	(2,123)	(2,318)
Prudent Valuation Adjustment	(746)	(735)
Adjustments related to changes in the value of own liabilities	468	200
Others	(891)	(1,016)
Total CRR/CRD4 regulatory deductions and regulatory adjustments	(4,394)	(5,000)

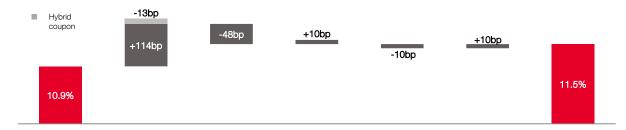
CRR/CRD4 prudential deductions and restatements included in "Others" essentially involve the following:

- any positive difference between expected losses on customer loans and receivables, measured according to the Internal Ratings Based (IRB) approach, and the sum of related value adjustments and collective impairment losses;
- unrealised gains and losses on cash flow hedges;
- assets from defined benefit pension funds, net of deferred taxes;
- securitisation exposures weighted at 1,250%, where these positions are not included in the calculation of total risk-weighted exposures.
- expected losses on equity portfolio exposures;

### TABLE 8: BREAKDOWN OF PRUDENTIAL CAPITAL REQUIREMENT FOR SOCIETE GENERALE AS AT 01.01.2017 (IN%) – FULLY-LOADED RATIO

(In%)	01.01.2017
Minimum requirement for Pillar 1	4.5%
Minimum requirement for Pillar 2 (P2R)	1.5%
Minimum requirement for conservation buffer	1.25%
Minimum requirement for systemic buffer	0.5%
Minimum requirement for countercyclical buffer	0.04%
Minimum requirement for CET1 ratio	7.79%

### CHANGES IN THE FULLY-LOADED COMMON EQUITY TIER (CET1) RATIO



The fully-loaded Common Equity Tier 1 ratio, calculated according to CRR/CRD4 rules, including the Danish compromise for insurance activities, amounted to 11.5% at 31st December 2016, versus 10.9% at 31st December 2015. This increase is due primarily to the earnings for the financial year.

### 3.4. CAPITAL REQUIREMENTS

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

The following table has been changed compared to that of 2015, and is prepared using the format of the OV1 table as defined by the European Banking Authority (EBA) as part of the revision of Pillar 3.

### TABLE 9: GROUP CAPITAL REQUIREMENTS AND RISK-WEIGHTED ASSETS (IN EUR M) (OV1)

		_		
	31.12.2016	31.12.2015	31.12.2016	31.12.2015
(In EUR m)	RWA Minimum capital requirements		•	
Credit risk (excluding CCR)	260,632	258,748	20,851	20,700
Of which the standardised approach	106,105	106,701	8,489	8,536
Of which the foundation IRB (FIRB) approach	3,998	3,678	320	294
Of which the advanced IRB (AIRB) approach	133,241	129,907	10,659	10,393
Of which equity IRB under the simple risk-weighted approach or the IMA	17 288	18 462	1 383	1 477
CCR	30,860	32,219,	2,468	2,578
Of which CVA	5,089	5,534	407	443
Risk exposure amount for contributions to the default fund of a CCP	899	710	72	57
Settlement risk	8	2	1	-
Securitisation exposures in the banking book (after the cap)	1,821	1,864	146	149
Of which IRB approach	154	328	13	26
Of which IRB supervisory formula approach (SFA)	27	42	2	3
Of which internal assessment approach (IAA)	1,380	1,205	110	96
Of which standardised approach	260	289	21	23
Market risk	16,873	19,328	1,350	1,546
Of which the standardised approach	1,238	1,988	99	159
Of which IMA	15,635	17,340	1,251	1,387
Operational risk	44,385	43,854	3,550	3,508
Of which Basic Indicator Approach	-	-	-	-
Of which Standardised Approach	3,071	3,137	246	251
Of which Advanced Measurement Approach	41,314	40,717	3,305	3,257
Floor adjustment	-	-	-	-
Total	355,478	356,725	28,438	28,538

### Change in risk-weighted assets and capital requirements

The following table presents the risk-weighted assets by pillar (fully loaded).

### TABLE 10: RISK-WEIGHTED ASSETS (RWA) BY PILLAR AND RISK TYPE

(In EUR bn)	Credit	Market	Operational	Total 2016	Total 2015
French Retail Banking	92.56	0.03	4.75	97.34	96.65
International Retail Banking and Financial Services	105.69	0.04	6.98	112.71	105.51
Global Banking and Investor Solutions	85.23	16.51	29.29	131.03	138.18
Corporate Centre	10.74	0.29	3.37	14.40	16.39
Group	294.22	16.87	44.39	355.48	356.73

At 31<sup>st</sup> December 2016, RWA (EUR 355.5 billion) broke down as follows:

credit risk accounted for 83% of RWA (of which 36% for International Retail Banking and Financial Services);

market risk accounted for 5% of RWA (of which 98% for Global Banking and Investor Solutions);

operational risk accounted for 12% of RWA (of which 66% for Global Banking and Investor Solutions).

# Information relative to key subsidiaries' contributions to the group's risk-weighted assets

The contributions of the three key subsidiaries collectively contributing more than 10% of the Group's risk-weighted assets are as follows:

### TABLE 11: KEY SUBSIDIARIES' CONTRIBUTION TO THE GROUP'S RISK-WEIGHTED ASSETS

	Crédit	du Nord	Ro	sbank	Komerč	ini Banka
(In EUR m)	IRB	Standard	IRB	Standard	IRB	Standard
Credit and counterparty risk	16,554	2,666	818	7,287	10,694	2,118
Sovereign	0	26	754	27	404	3
Financial institutions	155	42	0	592	1,038	26
Corporate	9,165	719	0	5,002	5,762	1,053
Retail	5,818	799	0	1,248	3,371	687
Securitisation	0	0	0	0	0	0
Equity investments	1,416	265	64	0	119	0
Other assets	0	815	0	418	0	349
Market risk		33		58		21
Operational risk	1,	069	1	973	7	23
Total 2016	20	,322	9	,136	13	,556
Total 2015	19	,748	8	,220	12	,490

### 3.5. CAPITAL MANAGEMENT

As part of managing its capital, 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;
- adequate allocation of capital to the various business lines 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 the adequacy of the Group's capital ratios in light of regulatory constraints. At 31<sup>st</sup> December 2016, the Group's Common Equity Tier 1 ratio was 11.5% (fully loaded) and 11.8% (phased-in).

In 2016, the Group's capital generation funded growth in riskweighted assets and the developments in its operations portfolio (specifically the year's acquisitions), all while maintaining a sufficient margin to ensure dividend and hybrid coupons payment.

In addition, the Group maintains a balanced capital allocation among its three strategic pillars:

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

Each of the Group's three pillars accounts for around a third of all risk-weighted assets (RWA), with French and International Retail Banking (more than 59% of total business line loans and receivables) and credit risks (representing 67% of the Group's risk-weighted assets) accounting for the largest share.

At 31<sup>st</sup> December 2016, the Group's risk-weighted assets were down 0.3% to EUR 355.5 billion, compared to EUR 356.7 billion at end-December 2015.

### 3.6. LEVERAGE RATIO MANAGEMENT

The Group steers its leverage effect according to the CRR leverage ratio rules, as amended by the delegated act of  $10^{th}$  October 2014.

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

The Group aims to maintain a consolidated leverage ratio that is significantly higher than the 3% minimum in the Basel Committee's recommendations. The leverage ratio is in an

observation phase in order to set the minimum requirements. Once they have been set, the Group's target will be adjusted as needed.

At the end of 2016, sustained by the higher Common Equity Tier 1 capital and additional Tier 1 capital, and the control of the Group's leverage exposure, Societe Generale's leverage ratio was 4.2% (compared with 4.0% at end-2015).

### TABLE 12: SUMMARY RECONCILIATION OF ACCOUNTING ASSETS AND LEVERAGE RATIO EXPOSURES (LRSUM)

(In EUR m)		31.12.2016	31.12.2015
1	Total assets as per published financial statements	1,382,241	1,334,391
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(111,901)	(105,909)
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")	0	0
4	Adjustments for derivative financial instruments	(111,830)	(88,837)
5	Adjustments for securities financing transactions "SFTs"	(22,029)	(25,097)
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	90,602	90,374
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)	0	0
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	0	0
7	Other adjustments	(10,232)	(10,117)
8	Total leverage ratio exposure	1,216,851	1,194,805

## TABLE 13: LEVERAGE RATIO COMMON DISCLOSURE (LRCOM)

(In EUR m)		31.12.2016	31.12.2015
On-balanc	e sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	838,223	802,731
2	(Asset amounts deducted in determining Tier 1 capital)	(10,232)	(10,118)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	827,991	792,613
Derivative	exposures		
4	Replacement cost associated with <i>all</i> derivatives transactions (ie net of eligible cash variation margin)	19,403	21,076
5	Add-on amounts for PFE associated with <i>all</i> derivatives transactions (mark-to-market method)	100,202	109,809
EU-5a	Exposure determined under Original Exposure Method	0	C
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	0	C
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(24,716)	(18,650)
8	(Exempted CCP leg of client-cleared trade exposures)	(26,224)	(21,138)
9	Adjusted effective notional amount of written credit derivatives	236,547	338,446
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(206,157)	(303,854)
11	Total derivative exposures (sum of lines 4 to 10)	99,054	125,689
Securities	financing transaction exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	258,513	254,343
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(71,805)	(84,800)
14	Counterparty credit risk exposure for SFT assets	12,495	16,586
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	0	C
15	Agent transaction exposures	0	0
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	0	0
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	199,204	186,129
Other off-I	palance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	185,844	188,086
18	(Adjustments for conversion to credit equivalent amounts)	(95,242)	(97,712)
19	Other off-balance sheet exposures (sum of lines 17 to 18)	90,602	90,374
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)	0	C
EU-19b	No 575/2013 (on and off balance sheet)) (Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	0	C
Capital an	d total exposures		
20	Tier 1 capital	51,548	48,112
21	Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	1,216,851	1,194,805
Leverage	ratio		
22	Leverage ratio	4.2%	4.0%
	transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased in	Fully phased in
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU)	0	
20-24	NO 575/2013	0	C

# TABLE 14: LEVERAGE RATIO - SPLIT-UP OF ON BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS AND EXEMPTED EXPOSURES) (LRSPL)

	31.12.2016	31.12.2015
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	838,223	802,731
Trading book exposures	95,005	116,813
Banking book exposures, of which:	743,218	685,918
Covered bonds	0	0
Exposures treated as sovereigns	193,090	175,411
Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	13,666	14,996
Institutions	51,964	39,135
Secured by mortgages of immovable properties	14,414	17,556
Retail exposures	165,756	159,234
Corporate	184,330	189,332
Exposures in default	10,535	12,379
Other exposures (eg equity, securitisations, and other non-credit obligation assets)	109,463	77,875
	of which:         Trading book exposures         Banking book exposures, of which:         Covered bonds         Exposures treated as sovereigns         Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns         Institutions         Secured by mortgages of immovable properties         Retail exposures         Corporate         Exposures in default	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:838,223Trading book exposures95,005Banking book exposures, of which:743,218Covered bonds0Exposures treated as sovereigns193,090Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns13,666Institutions51,964Secured by mortgages of immovable properties14,414Retail exposures165,756Corporate184,330Exposures in default10,535

### 3.7. RATIO OF LARGE EXPOSURES

The CRR (European Capital Requirements Regulation) incorporates the provisions regulating large exposures. As such, the Societe Generale Group must not have any exposure where the total amount of net risks incurred on a single beneficiary exceeds 25% of the Group's capital.

The eligible capital used to calculate the large exposure ratio is the total regulatory capital, with a limit on the amount of Tier 2 capital. Tier 2 capital cannot exceed one-third of Tier 1 capital. The final rules of the Basel Committee on large exposures will be transposed in Europe via CRR2. The main change compared with the current CRR is the calculation of the regulatory limit (25%), henceforth expressed as a proportion of Tier 1 (instead of total capital), as well as the introduction of a cross-specific limit on systemic institutions (15%).

### 3.8. FINANCIAL CONGLOMERATE RATIO

The Societe Generale Group, also identified as a "Financial conglomerate", is subject to additional supervision by the French Prudential Supervisory and Resolution Authority (ACPR).

At 31<sup>st</sup> December 2016, Societe Generale Group's financial conglomerate equity covered the solvency requirements for

both banking activities and insurance activities. At 31<sup>st</sup> December 2015, the financial conglomerate ratio was 194%, consisting of a numerator "Own funds of the Financial Conglomerate" of EUR 62 billion, and a denominator "Regulatory requirement of the Financial Conglomerate" of EUR 32 billion.

# 3.9. APPENDIX: INFORMATION ON REGULATORY OWN FUNDS AND SOLVENCY RATIOS

### TABLE 6a: REGULATORY OWN FUNDS AND CRR/CRD4 SOLVENCY RATIOS (DETAILS OF TABLE 6)

	2015	2016				
(In EUR m)	Fully Loaded	Fully Loaded	Phased- In	Crosse ref.Table 2 p31-34	Crosse ref. Table 6b p. 49	Cross Ref. notes
Common Equity Tier 1 capital (CET1): Instruments and reserves	49,965	51,891	52,253			
of which capital instruments and the related share premium accounts	19,979	19,986	19,986	7	1	
of which retained earnings	4,921	4,096	4,096	9	2	
of which accumulated other comprehensive income (and other reserve, to include unrealised gains and losses under the applicable accounting standards)	21,473	24,363	24,363	10	3	1
of which minority interests (amounts allowed in consolidated CET1)	1,355	1,522	1,884	12	5	2
of which independtly reviewed interim profits net of any forseeable charge or dividend	2,237	1,924	1,924	11	5a	
Common Equity Tier 1 capital (CET1): Regulatory adjustments	(11,100)	(10,954)	(10,290)			
of which additional value adjustments (negative amount)	(735)	(746)	(739)		7	
of which intangible assests (net of related tax liabilities)	(5,975)	(6,334)	(6,334)	5	8	3
of which deferred tax assets that rely on future profitability excluding	(2)2:2)	(-,,	(0,000)	-	-	
those arising from temporary differences	(2,318)	(2,123)	(1,193)	2	10	4
of which fair value reserves related to gains or losses on cash flow hedges	(86)	(73)	(73)		11	5
of which negative amounts resulting from the calculation of expected loss amounts	(759)	(667)	(667)		12	
of which gains or losses on liabilities valued at fair value resulting from changes in own credit standing	199	468	468		14	6
of which defined-benefit pension fund assets (negative amount)	(20)	(43)	(26)	4	15	
of which direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(1,249)	(1,360)	(1,347)		16	
of which exposure amount of the items which qualify for a risk weight of 1250% where the institution opts for the deduction alternative	(93)	(34)	(34)		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	0	0			
of which regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	0	0	(303)		26a	
of which own funds CET1 or deductions – others	(64)	(43)	(43)			
Common Equity Tier 1 capital (CET1)	38,865	40,937	41,963		29	
Additionnal Tier 1 (AT1) capital: Instruments	9,384	10,749	10,794			
of which capital instruments and the related share premium accounts	6,282	7,878	7,878	8	30	7
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	3,057	2,985	2,985	8	33	7
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	46	(114)	(69)	12	34	8
Additionnal Tier 1 (AT1) capital: Regulatory adjustments	(137)	(138)	(151)			
of which direct and indirect holdings by an institution of own AT1 instruments (negative amount)	(125)	(125)	(138)		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)	(12)	(13)	(13)	1	39	9
Additionnal Tier 1 (AT1) capital	9,247	10,611	10,643		44	
Tier 1 capital ( $T1 = CET1 + AT1$ )	48,112	51,548	52,606		45	
$\frac{1}{10} + \frac{1}{10} \frac{1}{10} = 0 - 11 + 11$		01,040	02,000		-10	

		20	16			
(Continued) (In EUR m)	Fully Loaded	Fully Loaded	Phased- In	Crosse ref.Table2 p31-34	Crosse ref. Table 6b p. 49	Cross Ref. notes
Tier 2 capital (T2): Instruments and provisions	10,022	12,013	11,995			
of which capital instruments and the related share premium accounts	10,778	12,742	12,742	6	46	10
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	366	297	297	8	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	49	47	29	12	48	11
of which credit risk adjustments	380	477	477		50	
of which direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(150)	(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)	(1,400)	(1,400)	(1,400)	1	54	
Tier 2 capital (T2)	10,022	12,013	11,995		58	
Total capital (TC= T1 + T2)	58,134	63,561	64,601		59	
Total risk weighted assets	353,197	355,478	355,478		60	
Ratio Common Equity Tier 1	10,9%	11,5%	11,8%		61	
Ratio Tier 1	13,5%	14,5%	14,8%		62	
Ratio Total capital	16,3%	17,9%	18,2%		63	

Phased in amounts refer to transitional provisions resulting from the application of CRR articles 465-491.

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 6b: TRANSITIONAL OWN FUNDS DISCLOSURE TEMPLATE

Common Equity Tier 1 (CETI) capital: instruments and reserves         19.986           1         Capital instruments and the related share prenum accounts         19.986           2         Petaned earlings         40.996           3         Accuruities dother comprehensive income (and other reserves, to include unrealised gains and losses under the exploate accounting standards).         0           3a         Funds for general barking items referred to in Article 484, paragraph 3 and the related stare premium accounts subject to phase out from CET1         0           Public sector capital injections grandfathered until 1st January 2018         0         1.8224           5a         Monority interestis (amount allowed in consolidated CET1)         1.8224         5           5a         Monority interestis (amount allowed in consolidated CET1)         1.8224         5           5a         Independently reviewed interim profile net of any foreseadable change or dividend         1.8244         5           7         Additional value adjustments (regame amount)         (6.334)         1         1           7         Additional value adjustments (regame amount)         (6.334)         1         1           8         Empty set in the EU         1         1         1         1         1         1         1         1         1         2         1	Rofo	rence (In EUR m)		Transitional provisions
1       Capital instruments and the related share premium accounts       19,986         2       Retained examings       4,996         3       Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)       0         3a       Fluids for general banking risk.       0         4       Amount of qualitying iters referred to in Antole 484, paragraph 3 and the related stare permium accounts subject to phase out from CET1       0         5       Minority interests (amount allowed in consolidated CET1)       1,522       0         6       Common Equity Ter 1 (CET1) capital barrequilatory adjustments       51,891       2         7       Additional value adjustments insightive amount)       (746)       1         9       Empty set in the EU       1       2       1         10       Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax isbility) (negative amount)       (6,374)         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting thom to exclusition of expected loss amounts       (687)         13       Any increase in equity that results from securitised assets (negative amount)       (438)         14       Defined-benefit pension fund assets (n			Gate	provisions
2       Relatined earnings       4,006         3       Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the gapingable accounting standards).       24,363         3a       Funds for general barking risk       0         4       Anount of qualifying times referred to in Article 484, paragraph 3 and the 0       0         9       Independently reviewed in consolidated CET1       0         1       Public sector capital injectories grandfathered until 151 January 2016       1,522         2       Independently reviewed in consolidated CET1       1,522         3       Funds for general barking risk       51,891         2       Common Equity Tier 1 (CET1) capital regulatory adjustments       66,71         7       Additional value adjustments (negative amount)       (6,334)         9       Empty set in the EU       115         10       Detered tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability) intersits from season cash flow the days anount)       0         11       Far value reserves related tax seast tax       (667)         12       Nay increase in equity the results from season cash flow the indegate amount)       0         14       Gains or losses on labilities valued at fair value resulting from thaneses in caucy thaneses in caucy that results			19,986	
3         Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting statements         24,363           3a         Funds for general banking risk         0           4         Amount of qualifying items referred to in Article 484, paragraph 3 and the nelated state premium accounts subject to phase out from CET1         0           9         Public sector capital injections grandlathered until 1st January 2018         0           5         Minority Interests (amount allowed in concounts aubject to phase out from CET1         15,22           6         Common Equity Tier 1 (CET1) capital tregulatory adjustments         51,891         52           7         Additional value adjustments (negative amount)         (746)         1           9         Empty set in the EU         1         1           9         Empty set in the EU         1         2         1           10         Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related to a gains or losses on cash flow hedges         11         1           11         Far value reserves related to gains or losses on cash flow hedges         11         1         3           12         Negative amountin sesting from the calculation of expected loss amountis         0         0         1           13				
3a       Funds for general banking risk       0         4       Amount of qualifying terms referred to in Article 484, paragraph 3 and the Public sector capital injections grandfathered until 1st January 2018       0         5       Minority interests (amount allowed in consolidated CCT1)       1,522       2         6       Common Equity Tier 1 (CET1) capital regulatory adjustments       61,891       2         7       Additional value adjustments (negative amount)       (746)         8       Intangible assets (net of related tax liability) (negative amount)       (63.34)         9       Empty set in the EU       115         10       Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability) (negative amount)       (66.7)         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in activit that results from securities where these entities have relopical cross holdings       (115)         14       Belnet entities (not assets (negative amount)       (43)         15       Defined baset tax inclusity of own CET1 instruments of the sector       (1,360)         16       Defined baset tax incluse own functins sectorefites where thesentiticand andirect holding		Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the	,	
A Anount of qualitying term referred to in Article 484, paragraph 3 and the related share premium accounts subject to phase out from CET 1 Public sector captal injections granditativered until 1st January 2018 Minority interests (amount allowed in consolidated CET) 1,522 3 Independently reviewed in interim profits not of any foreseeable charge or dividend 1,924 6 Common Equity Ter 1 (CET) capital regulatory adjustments 7 Additional value adjustments (negative amount) 6 Intargolite assists (net or related tax likelity) (negative amount) 6 Intargolite assists (net or related tax likelity) (negative amount) 9 Empty set in the EU 10 Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related 11 Fair value reserves related to gains or losses on cash flow hedges 11 Fair value reserves related to gains or losses on cash flow hedges 12 Negative amounts resulting from the capital value resulting assets (negative amount) 13 Any increase in equity that results from securitised assets (negative amount) 14 Gains or losses on liability value reserves related to gains or losses on cash flow hedges 15 Defined-benefit pension fluid assets (negative amount) 16 Direct and indirect holdings by an institution of own CET1 instruments (negative amount) 10 Direct, indirect and synthetic of financial soctor entities where + those entities have reciprocal cross holdings 16 thindires to holdings by the institution of the CET1 instruments of 17 which is institution designed to inflate artificially the own funds of the institution (negative amount) 10 Direct, indirect and synthet holdings by the institution of the CET1 instruments of 18 entities where the institution of the GET1 instruments of 19 financial sector entities where the institution of the GET1 instruments of 10 financial sector entities where the institution of the GET1 instruments of 11 financial sector entities where the institution has a significant investment in those entities 12 Empty	3a		0	
*         related share primum accounts subject to phase out from CET1         0           Public sector captal injections grandfathered until 14 January 2018         0           5         Minority interests (amount allowed in consolidated CET1)         1,522         3           6         Cormon Equity Tier 1 (CET1) captal regulatory adjustments         61,891         3           7         Additional value adjustments (negative amount)         (746)           8         Intangible assets (net of related tax liability) (negative amount)         (6,334)           9         Empty set in the EU         (512)           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 39, paragraph 3 are met) (negative amount)         (676)           11         Fair value reserves related to gains or focuses (negative amount)         0           12         Negative amounts resulting from the calculation of expected loss amounts         (667)           13         Any increase in equity that results from gavies mount)         0           14         Gains or losses on liabilities value at fair value resulting from changes in own credit standing         468           16         Direct and indirect holdings by an institution of own CET1 instruments of financial sector         0           14         Gains or loss				
Public sector capital injections grandtathered until 1st January 2018       0         5 Minority interests (amount allowed in consolidated CET1)       1,522       3         6 Common Equity Ter 1 (CET1) capital before regulatory adjustments       61,891       3         7 Additional value adjustments integative amount)       (746)       3         8 Intragible assists (net of related tax liability) (negative amount)       (6.334)       5         9 Empty set in the EU       (2,123)       c       c         10 bacterize 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 med) (negative amount)       (2,123)       c         11 Fair value reserves related to gains or losses on cash flow hedges       (115)       c         12 Negative amounts resulting from the cabulation of expected loss amounts       (667)       c         13 Any increase in equity that results from expected loss amounts       (15)       c         15 Defined-benefit pension fund assets (negative amount)       (1,360)       c       c         16 Direct and indirect holdings by an institution of expected fuse amount)       (1,360)       c         16 Direct and indirect holdings by the institution of expected fuse amount)       (1,360)       c         17 Holdings of the CET1 instruments of financial sector entities where the institu	4		0	
5       Minority interests (amount allowed in consolidated CETI)       1.522       3         5a       Independently reviewed interim profits net of any foreseeable charge or dividend       1.924       5         5a       Common Equity Tier 1 (CETI) capital regulatory adjustments       51,891       2         7       Additional value adjustments (regative amount)       (6,334)       9         9       Empty set in the EU       (6,334)       9         10       Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability) (regative amount)       (6,715)         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results from socuritised assets (negative amount)       (1,360)         14       Gains or losses on liabilities value at fair value resulting from changes in own credit standing       488         16       Defined tax instance of financial sector entiles where the institution of expected loss amount)       (1,360)         17       Holdings of the CET1 instruments of financial sector       0         16       Defined tax institution of the CET1 instruments of financial sector       0         17       Holdings by the			0	
5a       Independently reviewed interim profits net of any foreseeable charge or dividend       1.924         6       Common Equity Tier 1 (CETI) capital regulatory adjustments       51,891       2         7       Additional value adjustments (negative amount)       (746)         8       Intrangible assets finat or lealed tax liability) (negative amount)       (6.334)         9       Empty set in the EU       (2,123)       cc         10       Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax assets in the conditions in Article 38, paragraph 3 are met) (negative amount)       (2,123)       cc         11       Fair value reservices calculator of expected loss amounts       (667)       13       Any increase in equity that results from securitize dassets (negative amount)       (43)         16       Defend tax assets and and indices holdings by an institution of own CET1 instruments (negative amount)       (1,360)         17       Holdings of the CET1 ins	5		1,522	362
6       Common Equity Tier 1 (CET1) capital regulatory adjustments       51,891       3         Common Equity Tier 1 (CET1) capital: regulatory adjustments       (746)         7       Additional value adjustments (negative amount)       (6,334)         9       Empty set in the EU       (2,123)       (2,123)         10       Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability) (negative amount)       (2,123)       (2,123)         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results form securitised dassets (negative amount)       (43)         14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       468         14       Bolfred-benefit pension fund assets (negative amount)       (1,360)         17       Holdings of the CET1 instruments of financial sector relative amount)       (1,360)         18       Inter and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution dees not thave a significant investment in those entities       0         19       Indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution of				
Common Equity Tier 1 (CET1) capital: regulatory adjustments         (746)           7         Additional value adjustments (negative amount)         (6.334)           9         Empty set in the EU         (6.334)           10         Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability) (negative amount)         (2.123)         (2           11         Fair value reserves related to gains or losses on cash flow hedges         (115)           12         Negative amounts resulting from the calculation of expected loss amounts         (667)           13         Any increase in equity that results from securitized assets (negative amount)         0           14         Gains or losses on liabilities value at fair value resulting from changes in own credit standing         (488)           15         Defined-benefit pension fund assets (negative amount)         (1.360)           17         Holdings to an institution of tow CET1 instruments of financial sector         (1.360)           18         entities where the institution does not have a significant investment in those entities         0           19         financial sector entities where the institution of the CET1 instruments of financial sector         0           19         financial sector entities shore notities         0         0           19         financial sector entiti				362
7       Additional value adjustments (negative amount)       (746)         8       Intangible assets (net of related tax liability) (negative amount)       (6.334)         9       Empty set in the EU       (2,123)       (2,123)         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)       (2,123)       (2,123)         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results from securitised assets (negative amount)       0         14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       (43)         16       Direct and indirect holdings by an institution of own CET1 instruments (negative amount)       (1,360)         17       Holdings of threshold and net of eligible short positions (negative amount)       0         18       entities where the institution of short bave a significant investment in those entities       0         18       entities where the institution of the CET1 instruments of inancial sector entities where the institution des not short bave a significant investment in those entities       0         19       financ				
8       Intangible assets (net of related tax liability) (negative amount)       (6,334)         9       Empty set in the EU       Empty set in the EU         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)       (2,123)       (2         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results from securitised assets (negative amount)       0         14       Gains or losses on liabilities valued at fair value resulting from charges in own credit standing       (468)         15       Defined-benefit pension fund assets (negative amount)       (1,360)         16       Direct and indirect holdings by an institution of wor CET1 instruments of financial sector       (1,360)         17       Holdings of the CET1 instruments of financial sector       0         18       entities where the institution of the CET1 instruments of financial sector       0         19       financial sector entities where the institution of the CET1 instruments of financial sector       0         20       Empty set in the EU       0       0         20       of which: secur			(746)	7
9       Empty set in the EU       C1 -			· · · ·	
10         Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related (2,123)         (2,123)           11         Fair value reserves related to gains or losses on cash flow hedges         (115)           12         Negative amounts resulting from the calculation of expected loss amounts         (667)           13         Any increase in equity that results from securitised assets (negative amount)         0           14         Gains or losses on liabilities valued at fair value resulting from changes in own credit standing         468           15         Defined-benefit pension fund assets (negative amount)         (1360)           17         Holdings of the CET1 instruments of financial sector entities where+ those entities have reciprocal cross holdings on with the institution of own CET1 instruments of financial sector         (118)           18         entities where the institution of the CET1 instruments of financial sector         (118)           19         financial sector entities where the institution of the CET1 instruments of financial sector         (119)           19         financial sector entities where the institution of the CET1 instruments of financial sector entities where the institution of the CET1 instruments of financial sector entities where the institution on the CET1 instruments of financial sector entities where the institution on the CET1 instruments of financial sector entities where the institution on the CET1 instruments of financial sector entities where the instintitution as a significant inv			(0,00.1)	
10       tax liability where the conditions in Article 38, paragraph 3 are met) (negative amount)       (2,123)       s         11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results from socuritised assets (negative amount)       0         14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       468         15       Defined-benefit pension fund assets (negative amount)       (1,360)         17       Holdings of the CET1 instruments of financial sector entities where+ those entities have reciprocal cross holdings       0         16       Drirect and indirect holdings by the institution of the CET1 instruments of financial sector       1         18       entities where the institution of son thave a significant investment in those entities       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0       0         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution ogsts for the deduction alternative       0         20b       of which: incet and sing from themporary differences (amount bove 10% threshold, net       0         20d       of which: incet arind indirect holdings by the institution of the CET1 inst			()	
11       Fair value reserves related to gains or losses on cash flow hedges       (115)         12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results from securitized assets (negative amount)       0         14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       468         15       Defined-benefit pension fund assets (negative amount)       (1.360)         17       Holdings of the CET1 instruments of inancial sector entities where those entities may reciprocal cross holdings of the institution designed to inflate artificially the own funds of the institution (negative amount)       0         Direct and indirect holdings by the institution of the CET1 instruments of financial sector         Initiation of the CET1 instruments of financial sector         Initiation of the CET1 instruments of         Initiancial sector entities where the institution of the CET1 instruments of         Initiancial sector entities where the institution of the CET1 instruments of         Initiancial sector (negative amount)         Direct, indirect and synthetic holdings by the institution of the CET1 instruments of         Initiancial sector (negative amount)       0         On which the EU         Initiancial sector (negative amount)	10		(2,123)	930
12       Negative amounts resulting from the calculation of expected loss amounts       (667)         13       Any increase in equity that results from securitised assets (negative amount)       0         14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       468         15       Defined-benefit pension fund assets (negative amount)       (43)         16       Direct and indirect holdings by an institution of own CET1 instruments (negative amount)       (1,360)         17       Holdings of the CET1 instruments of financial sector entities have reciprocal cross holdings       0         with the institutions designed to inflate artificially the own funds of the institution (negative amount)       0         18       entities where the institution of the CET1 instruments of financial sector       0         19       entities where the institution has a significant investment in those entities       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0         20       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       0         20       of which: gualify poldings outide the financial sector (negative amount)       0       0         21       Defered tax asset arising from thempoary differences (amount above 10% threshold, net of related tax liability where the conditions in 38, para	11		(115)	
13       Any increase in equity that results from securitised assets (negative amount)       0         14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       468         15       Defined-benefit pension fund assets (negative amount)       (143)         16       Direct and indirect holdings by an institution of own CET1 instruments (negative amount)       (1,360)         17       Holdings of the CET1 instruments of financial sector entities where the institution designed to inflate artificially the own funds of the institution (negative amount)       0         Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0         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       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0         20       Empty set in the EU       2         20a       financial sector entities where the institution opts for the deduction alternative       (34)         20d       of which: securitises in positions (negative amount)       0       0         20d       of which: securitises more the institution path are mericin alternatise actor (negative amount)       0 </td <td></td> <td></td> <td>. ,</td> <td></td>			. ,	
14       Gains or losses on liabilities valued at fair value resulting from changes in own credit standing       468         15       Defined-benefit pension fund assets (negative amount)       (43)         16       Direct and indirect holdings by an institution of own CET1 instruments (negative amount)       (1,360)         17       Holdings of the CET1 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)       0         Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         18       entities where 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       Empty set in the EU       0         20       Empty set in the EU       0         20       of which: gualifying holdings outside the financial sector (negative amount)       0         20       of which: securitisation positions (negative amount)       0         21			( /	
15       Defined-benefit pension fund assets (negative amount)       (43)         16       Direct and indirect holdings by an institution of own CET1 instruments (negative amount)       (1,360)         17       Holdings of the CET1 instruments of financial sector entities where + those entities have reciprocal cross holdings       0         18       Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         18       entities where the institution does not have a significant investment in those entities       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0         19       financial sector entities where the institution of the CET1 instruments of       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0         20       Empty set in the EU       (34)         20       of which: securitistion positions (negative amount)       0         21       Deferred tax assets arising from temporary differences (amount above 10% threshold, net or rela				
16       Direct and indirect holdings by an institution of own CET1 instruments (negative amount)       (1,360)         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)       0         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       0         18       entities where the institution of the OET1 instruments of financial sector entities where the institution of the OET1 instruments of       0         19       financial sector entities where the institution of the OET1 instruments of       0         20       Empty set in the EU       0         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution options (negative amount)       0         20a       for which: securitisation positions (negative amount)       0       0         20b       of which: securitisation positions in (negative amount)       0       0         210       of which: securitisation positions in 38, paragraph 3 are met) (negative amount)       0       0         22       Amount exceeding the 15% threshold (negative amount)       0       0       0         22       Amount exceeding the 15% threshold (negative amount)       0				17
Holdings of the CET1 instruments of financial sector entities where+ those entities have reciprocal cross holdings       0         Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         entities where the institution does not have a significant investment in those entities       0         Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         entities where the institution does not have a significant investment in those entities       0         Imancial sector entities where the institution has a significant investment in those entities       0         emount above 10% threshold and net of eligible short positions) (negative amount)       0         20       Empty set in the EU       0         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution policings outside the financial sector (negative amount)       0         20b       of which: securitisation positions (negative amount)       0         20d       of which: securitisation positions (negative amount)       0         21       Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities       961         22       Amount exceeding the 15% threshold (negative amount)       0       0				13
17       with the institutions designed to inflate artificially the own funds of the institution (negative amount)       0         Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         18       entities where the institution due a significant investment in those entities       0         Direct, indirect and synthetic holdings by the institution of the CET1 instruments of       0         19       financial sector entities where the institution has a significant investment in those entities       0         20       Empty set in the EU       0         20a       Mapter the institution opts for the deduction alternative       (34)         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: reactifying holdings outside the financial sector (negative amount)       0         20c       of which: readifying holdings outside the financial sector (negative amount)       0         20d       of which: readifying holdings outside the financial sector (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0       0         23       of which: deferred tax assets aris				10
Direct and indirect holdings by the institution of the CET1 instruments of financial sector       0         18       entities where the institution does not have a significant investment in those entities       0         (amount above 10% threshold and net of eligible short positions) (negative amount)       0         Direct, indirect and synthetic holdings by the institution of the CET1 instruments of       0         19       financial sector entities where the institution has a significant investment in those entities       0         20       Empty set in the EU       20         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       (34)         20b       of which: securitisation positions (negative amount)       0         20c       of which: securitisation positions (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0       0         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       961         22       Amount exceeding the 15% threshold (negative amount)       0 <td< td=""><td>17</td><td></td><td>0</td><td></td></td<>	17		0	
18       entities where the institution does not have a significant investment in those entities       0         (arround above 10% threshold and net of eligible short positions) (negative amount)       0         19       financial sector entities where the institution has a significant investment in those entities       0         20a       Empty set in the EU       0         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       0         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: qualifying holdings outside the financial sector (negative amount)       0         20d       of which: rec deliveries (negative amount)       0         20d       of which: securitisation positions (negative amount)       0         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)       0         23       of which: different tax liability where the institution of the CET1 instruments of financial sector entities where the institution of the CET1 instruments of financial sector entities where the institution of the CET1 instruments of financial sector entities       961         24       Empty set in the EU       ,       25         25       functs diteferred tax asets arsing				
(amount above 10% threshold and net of eligible short positions) (negative amount)       Direct, indirect and synthetic holdings by the institution of the CET1 instruments of         19       financial sector entities where the institution has a significant investment in those entities       0         20       Empty set in the EU       (34)         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       0         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: securitisation positions (negative amount)       0         20d       of which: securitisation positions in 38, paragraph 3 are met) (negative amount)       0         21       Deferred tax liability where the conditions in 38, paragraph 3 are met) (negative amount)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,       .         25       of which: differences (negative amount)       0       .         26       arbity set in the EU       ,       .       .         24       Empty set in t	18		0	
Direct, indirect and synthetic holdings by the institution of the CET1 instruments of       0         19       financial sector entities where the institution has a significant investment in those entities       0         20       Empty set in the EU       20         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       0         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: securitisation positions (negative amount)       0         20d       of which: securitisation positions (negative amount)       0         20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,       .         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial				
19       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       Empty set in the EU       (34)         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       (34)         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: securitisation positions (negative amount)       0         20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,       .         25       of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the current financial year (negative amount)       0         26       related tax charges relating to CET1 items (negative amount)       0				
(amount above 10% threshold and net of eligible short positions) (negative amount)         20       Empty set in the EU         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       (34)         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: recediveries (negative amount)       0         20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,       25         25       of which: deferred tax assets arsing from temporary differences       3,015         26a       Regulatory adjustments relating to CET1 items (negative amount)       0         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3         26a       Regulatory adjustments relating to unrealised ga	19		0	
20       Empty set in the EU         20a       Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative       (34)         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: securitisation positions (negative amount)       0         20d       of which: securitisation positions (negative amount)       0         20d       of which: securitisation positions (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,       .         25       of which: differences arising from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0         26a       Regulatory adjustments applied to Common Equit				
20aExposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative(34)20bof which: qualifying holdings outside the financial sector (negative amount)020cof which: securitisation positions (negative amount)(34)20dof which: free deliveries (negative amount)(34)20dof which: free deliveries (negative amount)021Deferred 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)022Amount exceeding the 15% threshold (negative amount)023of 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 entities96124Empty set in the EU set in the EU,25of which: deferred tax assets arsing from temporary differences3,01525aLosses for the current financial year (negative amount)026Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment026aRegulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 4680(326aregulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 4680(326aof which: filter for unrealised loss 1 of which: filter for unrealised loss 2	20			
200       where the institution opts for the deduction alternative       (34)         20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: securitisation positions (negative amount)       (34)         20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         26b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3         of which: filter for unrealised loss 1       of which: filter for unrealised loss 1       0 <td>~~</td> <td></td> <td>(0.4)</td> <td></td>	~~		(0.4)	
20b       of which: qualifying holdings outside the financial sector (negative amount)       0         20c       of which: securitisation positions (negative amount)       (34)         20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       1	20a		(34)	
20c       of which: securitisation positions (negative amount)       (34)         20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0	20b		0	
20d       of which: free deliveries (negative amount)       0         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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: differences (amount)       0         25a       Losses for the current financial year (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       1	20c		(34)	
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)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         26       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0	20d		0	
21       of related tax liability where the conditions in 38, paragraph 3 are met) (negative amount)       0         22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         26       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0	~		0	
22       Amount exceeding the 15% threshold (negative amount)       0         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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         25b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0	21		0	0
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       961         24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         25b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       1	22		0	
24       Empty set in the EU       ,         25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         25b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       1	23	of which: direct and indirect holdings by the institution of the CET1 instruments of financial	961	
25       of which: deferred tax assets arsing from temporary differences       3,015         25a       Losses for the current financial year (negative amount)       0         25b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0	24			
25a       Losses for the current financial year (negative amount)       0         25b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0	25		3.015	
25b       Foreseeable tax charges relating to CET1 items (negative amount)       0         26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0       (3)				
26       Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment       0       (3)         26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       of which: filter for unrealised loss 2       0       (3)				
26a       Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468       0       (3)         of which: filter for unrealised loss 1       0       (3)         of which: filter for unrealised loss 2       0       (3)				(303)
of which: filter for unrealised loss 1 of which: filter for unrealised loss 2				(303)
of which: filter for unrealised loss 2				(230)
		of which: filter for unrealised gain 1		(102)

(conti	inued)		
	of which: filter for unrealised gain 2		(201)
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	0	
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution	0	
28	Total regulatory adjustment to Common Equity Tier 1 (CET1)	(10,954)	664
29	Common Equity Tier 1 (CET1) capital	40,937	1,026
Addit	tional Tier 1 (AT1) capital: instruments		
30	Capital instruments and the related share premium accounts	7,878	
31	of which: classified as equity under applicable accounting standards	7,878	
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 1st January 2018 Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5)	2,985	45
34	issued by subsidiaries and held by third parties	(114)	45
35	of which: instruments issued by subsidiaries subject to phase out		
36	Additional Tier 1 (AT1) capital before regulatory adjustments	10,749	45
Addi	tional Tier 1 (AT1) capital: regulatory adjustments		
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	(125)	(13)
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) Direct and indirect holdings of the AT1 instruments of financial sector entities where the institution does not have a	0	
39	significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	0	
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) Regulatory adjustments applied to AT1 in respect of amounts subject to pre- CRR treatment and transitional	(13)	
41	treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts) Residual amounts deducted from AT1 capital with regard to deduction from Common Equity Tier 1 capital during	0	
4 <b>1</b> a	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	0	
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	0	
41c	Amount to be deducted from or added to AT1 capital with regard to additional filters and deductions required pre- CRR	0	
	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)	0	
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	(138)	(13)
44	Additional Tier 1 (AT1) capital	10,611	32
45	Tier 1 capital (T1= CET1+AT1)	51,548	1,058
Tier 2	2 (T2) capital: instruments and provisions		
46	Capital instruments and the related share premium accounts	12,742	
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 1st January 2018	297	
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	47	(19)
49	of which: instruments issued by subsidiaries subject to phase out	0	0
50	Credit risk adjustments	477	
51	Tier 2 (T2) capital before regulatory adjustments	13,563	(19)
Tier 2	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)	0	
(conti			

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 1st 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)	(1,400)	
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)	0	
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	0	
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	0	
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre- CRR	0	
	of which: filter for unrealised losses		
	of which: filter for unrealised gains		
57	Total regulatory adjustments to Tier 2 (T2) capital	(1,550)	0
58	Tier 2 (T2) capital	12,013	(19)
59	Total capital (TC=T1+T2)	63,561	1,039
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) 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	0	0
	CET1, etc.) of which: items not deducted from AT1 (Regulation (EU) No 575/2013 residual amounts) (items to be detailed line	0	0
	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.)	0	0
	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)	0	0
60	Total risk weighted assets	355,478	0
Ratio	s de fonds propres et cousins		
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	0	0
62	Tier 1 (as a percentage of risk exposure amount)	0	0
63	Total capital (as a percentage of risk exposure amount)	0	0
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)	3,143	0
65	of which: capital conservation buffer requirement	2,222	
66	of which: countercyclical buffer requirement	33	
67	of which: systemic risk buffer requirement	0	
67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	888	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)		
69	[non relevant in the EU regulation]		
70	[non relevant in the EU regulation]		
71	[non relevant in the EU regulation]		
Capit	al 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)	2,494	

(cont	inued)		
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)	961	
74	Empty set in the EU		
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)	3,015	
Appl	icable 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)	477	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	112,468	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the gap)	0	
79	Cap for inclusion of credit risk adjustments in T2 under internal rating-based approach	179,913	
Capi	tal instruments subject to phase-out arrangements (only applicable between 1st January 2014 and 1st January 2	2022)	
80	Current cap on CET1 instruments subject to phase out arrangements	0	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	0	
82	Current cap on AT1 instruments subject to phase out arrangements	3,534	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	0	
84	Current cap on T2 instruments subject to phase out arrangements	447	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	0	

### TABLE 15: FULLY LOADED REGULATORY CAPITAL FLOWS

(In EUR m)	
End-2015 Common Equity Tier One Capital	38,865
Change in share capital resulting from the capital increase	2
Net income, Group share	(128)
Change in the provision for 2017 dividends	(165)
Change linked to translation differences	250
Change in value of financial instruments	(273)
Change in non-controlling interests	136
Change in goodwill and intangible assets	(359)
Change in deductions	(606)
Other	3,215
End-2016 Common Equity Tier 1 capital	40,937
End-2015 Additional Tier 1 capital	9,247
Change in debt instruments eligible for additional Tier 1	1,524
Change in other additional Tier 1 capital	(159)
Change in deductions	(1)
End-2016 Additional Tier 1 capital	10,611
Change in debt instruments eligible for Tier 2	10,022
Variation des instruments Tier 2	1,896
Change in other Tier 2 capital	95
Change in deductions	0
End-2016 Tier 2 capital	12,013

### TABLE 16: COUNTER CYCLICAL-BUFFER CAPITAL REQUIREMENTS

At 31st December 2016, only three countries (Hong-Kong, Norway, Sweden) present a non-zero ratio . The countercyclical buffer requirement for the Societe Generale Group in 2016 is not material.

	31.12.2016
Total risk exposure amount	355,478
Institution specific countercyclical capital buffer rate	0.01%
Institution specific countercyclical capital buffer requirement (amount in EUR m)	33

# IN BRIEF

Credit and counterparty risks (including concentration effects) correspond to the risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. Credit risk includes counterparty risk linked to market transactions and securitisation activities. In addition, credit risk may be further amplified by individual, country and sector concentration risk.

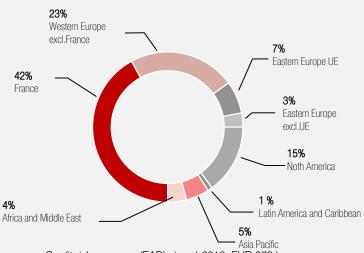
This section describes the Group's risk profile. It focuses on regulatory indicators, including Exposure at Default (EAD) and Risk Weighted Assets (RWA). The risk profile is analysed according to several approaches (countries, sectors, probability of default, residual maturities, etc.).

Credit risk RWA at end-2016 EUR 294.2 bn (Credit risk RWA at end-2015: EUR 293.5.bn)

EAD calculated in IRB (% of total credit risk)

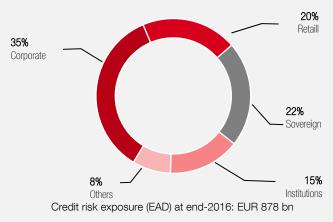
75% (Between 2015 and 2016)

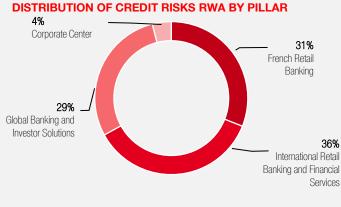
#### **CREDIT RISK EAD AT END-2016**



Credit risk exposure (EAD) at end-2016: EUR 878 bn

### DISTRIBUTION OF CREDIT RISK EAD BY PORTFOLIO





Credit risk RWA at end-2016: EUR 294 bn

# 4. CREDIT RISKS

### 4.1. CREDIT RISK MANAGEMENT: ORGANISATION AND STRUCTURE

The Risk Division has defined a control and monitoring system, in conjunction with the business divisions and based on the credit risk policy, to provide a framework for the Group's credit risk management. This framework is periodically reviewed and approved by the Board of Director's Risk Committee.

Credit risk supervision is organised by business division (French Retail Banking Networks, International Retail Banking and Financial Services, Global Banking and Investor Solutions) and is supplemented by departments with a more cross-business approach (monitoring of country risk, risk linked to financial institutions, etc.). In addition, the definition of counterparty risk assessment methods is provided by the Market Risk Department. Within the Risk Division, each of these departments is responsible for:

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

In addition, a specific department performs comprehensive portfolio analyses and provides the associated reports, including those for the supervisory authorities. A monthly report on the Risk Division's activity is presented to the Group Risk Committee (CORISQ) and specific analyses are submitted to the General Management.

### **4.2. CREDIT POLICY**

Societe Generale's credit policy is based on the principle that approval of any credit risk undertaking must be based on sound knowledge of the client and the client's business, an understanding of the purpose and structure of the transaction, and of the sources of repayment of the debt. Credit decisions must also ensure that the structure of the transaction will minimise the risk of loss in the event that the counterparty defaults. Furthermore, the credit approval process takes into

- responsibility for analysing and approving transactions lies with the dedicated primary customer relation unit and risk unit, which examine all authorisation requests relating to a specific client or client group, to ensure a consistent approach to risk management;
- the primary customer relation unit and the risk unit must be independent from each other;
- credit decisions must be systematically based on internal risk ratings (obligor rating), as provided by the primary customer relation unit and approved by the Risk Division.

consideration the overall commitment of the group to which the client belongs. Risk approval forms part of the Group's risk management strategy in line with its risk appetite.

The risk approval process is based on four core principles:

- all transactions involving credit risk (debtor risk,
- settlement/delivery risk, issuer risk and replacement risk) must be pre- authorised;

The Risk Division submits recommendations to CORISQ on the limits which it deems appropriate for certain countries, geographic regions, sectors, products or customer types, in order to reduce risks with strong correlations. The allocation of limits is subject to final approval by the Group's General Management and is based on a process that involves the operating divisions exposed to risk and the Risk Division.

### 4.3. RISK SUPERVISION AND MONITORING SYSTEM

# Portfolio review and sector risk monitoring

Authorisation limits are set by counterparty and the credit approval process must comply with the overall authorisation limit for the group to which the counterparty belongs.

Individual large exposures are reviewed by the Large Exposures Committee chaired by the General Management. Societe Generale complies with regulations governing large exposures<sup>(1)</sup>.

Concentrations are measured using an internal model and individual concentration limits are defined for larger exposures. Any concentration limit breach is managed over time by reducing exposures and/or hedging positions using credit derivatives.

Concentration targets are defined for the biggest counterparties at Concentration Committee meetings.

In addition, the Group regularly reviews its entire credit portfolio through analyses by type of counterparty or business sector. In addition to industry research and regular sector concentration analyses, sector research and more specific business portfolio analyses are carried out at the request of the bank's General Management and/or Risk Division and/or business divisions.

### **Monitoring of Country Risk**

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

It includes exposure to any kind of counterparty, including a sovereign state (sovereign risk is also controlled by the system of counterparty risk limits).

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, nonconvertibility, 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 possibly entailing other defaults.

Overall limits and strengthened monitoring of exposures have been established for countries based on their internal ratings and governance indicators. Supervision is not limited to emerging markets.

Country limits are approved annually by General Management. They can also 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 country of risk and a final country of risk (after the effects of any guarantees) within the country limits framework.

### Specific monitoring of hedge funds

Hedge funds are important counterparties for the Group. Whether they are regulated or not, and regardless of the nature of the end investor, hedge funds pose specific risks: they are able to use significant leverage as well as investment strategies that involve illiquid financial instruments, which leads to a strong correlation between credit risk and market risk.

Activities carried out in the hedge fund sector are governed by various rules, including a set of global limits established by General Management:

- a Credit VaR limit, which controls the maximum replacement risk that may be taken in this segment;
- a stress test limit governing market risks and the risks associated with financing transactions guaranteed by shares in hedge funds.

### **Credit stress tests**

With the aim of identifying, monitoring and managing credit risk, the Risk Division works with the business divisions 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 occasional stress tests, designed to recognise emerging risks. Some of these stress tests are presented to the Risk Committee and used to determine how to govern the activities concerned.

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

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

<sup>(1)</sup> Ratio of large exposures, p. 47.

### Impairment

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

The applicable accounting principles are set out in Note 3.8 to the consolidated financial statements provided in Chapter 6 of this Registration Document, p. 359.

### IMPAIRMENT ON GROUPS OF HOMOGENEOUS ASSETS

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

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

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

### SPECIFIC IMPAIRMENT

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

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

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

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

### 4.4. REPLACEMENT RISK

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

# Management of counterparty risk linked to market transactions

Societe Generale places great emphasis on carefully monitoring its credit and counterparty risk exposure in order to minimise its losses in case of default. Counterparty limits are assigned to all counterparties (banks, other financial institutions, corporates, public institutions and CCP).

In order to quantify the potential replacement risk, Societe Generale uses an internal model: the future fair value of market transactions with counterparties is modelled, taking into account any netting and correlation effects. The forecasts are derived from Monte-Carlo models developed by the Risk Division, based on a historical analysis of market risk factors, and take into account guarantees and collateral.

This internal model is used to compute the Effective Expected Positive Exposure (EEPE), a metric which is used to determine the counterparty risk regulatory capital requirements.

From an economic standpoint, in order to follow the positions, Societe Generale uses two indicators to characterise the distribution resulting from the Monte-Carlo simulations:

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

Societe Generale has also developed a set of stress test scenarios used to calculate the exposure linked to changes in the fair value of transactions with all its counterparties in the event of an extreme shock on market parameters.

### Setting individual counterparty limits

The credit profile of counterparties is reviewed on a regular basis and limits are set both according to the type and maturity of the instruments concerned. The intrinsic creditworthiness of counterparties and the reliability of the associated legal documentation are two factors considered when setting these limits.

Information technology systems allow both traders and the Risk Division to ensure that counterparty limits are not exceeded.

Any significant weakening in the bank's counterparties also prompts urgent internal rating reviews. A specific supervision and approval process is put in place for more sensitive counterparties or more complex financial instruments.

# Calculation of Exposure at Default<sup>(1)</sup> within the regulatory framework

The Autorité de Contrôle Prudentiel et de Résolution (ACPR – French Prudential Supervisory and Resolution Authority) approved the use of the internal model described above to determine the Effective Expected Positive Exposure (EEPE), which corresponds to the average of the positive exposure expected over a one-year period for a given counterparty.

This internal model covers 96% of transactions, excluding the former Newedge scope (Societe Generale Investment Limited). For other transactions, the Group uses the marked-to-market valuation method. In this method, the EAD relative to the Bank's counterparty risk is determined by aggregating the positive market values of all the transactions (replacement cost), and increasing the sum with an addon. This add-on, which is calculated in line with the CRD (Capital Requirement Directive) guidelines, is a fixed percentage depending on the type of transaction and the residual maturity, which is applied to the transaction's nominal value.

In both cases, the effects of netting agreements and collateral are factored in, either by their simulation in the internal model, or by applying the netting rules as defined by the marked-to-market method and by subtracting guarantees or collateral. Regulatory capital requirements also depend on the internal rating of the debtor counterparty.

# Credit valuation adjustment for counterparty risk

Derivatives and security financing transactions are subject to a Credit Valuation Adjustment (CVA) to take into account counterparty risk. The Group includes in this adjustment all clients which are not subject to a daily margin call or for which the collateral only partially covers the exposure. This adjustment also reflects the netting agreements existing for each counterparty. CVA is determined on the basis of the Group entity's positive expected exposure to the counterparty, the counterparty's probability of default (conditional on the entity not defaulting), and the loss in the event of default.

Furthermore, since 1st January 2014, financial institutions must determine capital requirements related to CVA, covering its variation over 10 days. The scope of counterparties is reduced to financial counterparties as defined in the EMIR (European Market Infrastructure Regulation) or certain corporates that would use derivatives beyond certain thresholds and for purposes other than hedging. Societe Generale has implemented an internal model to compute these capital requirements, covering 65% of the scope. The method used is the same as the one used for the market VaR computation (refer to the "Market Risk" chapter of the Registration Document): it consists of carrying out a historical simulation of the change in CVA due to the variations observed in the credit spreads of the counterparties, with a 99% confidence level. The computation is done 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 a period of significant tension regarding credit spreads (Stressed VaR on CVA). The associated capital requirements are equal to the sum of these two computations multiplied by a factor set by the regulator, specific to each bank. For the remaining part determined according to the standard method, Societe Generale applies the rules defined by the Capital Requirement Regulation: weighting by a normative factor of the EAD multiplied by a recomputed maturity.

(1) Exposure at default (EAD) of a loan is equal to its nominal amount. The potential loss amount of a derivative product is its marked-to-market valuation when the counterparty defaults, which can be only statistically approximated. Therefore, two methods for the calculation of the EAD of derivative products are allowed, one using the marked-to-market valuation and one using the internal model approach (see above).

The management of this exposure and regulatory capital charge led the Group to buy protection (such as Credit Default Swaps) from major financial institutions. In addition to reducing the credit risk, it decreases their variability resulting from a change in the credit spreads of counterparties.

### Wrong-way risk adjustment

Wrong-way risk is the risk that occurs when the Group exposure to a counterparty strongly increases whereas the probability that the counterparty defaults also increases.

There are two cases of wrong-way risk:

- general wrong-way risk, where there is a significant correlation between some market factors 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 transactions identified facing a specific wrong way risk are re-assessed in the EEPE computation with the hypothesis of a default from

the counterparty. More specifically, these transactions are reassessed in a conservative way, taking into account i) a null value for the counterparty's equity and ii) a value equal to the recovery rate for the bonds issued by the counterparty. This process leads to an increase of the capital requirements regarding counterparty risks on this kind of transaction. The economic counterparty risk (replacement risk) is also increased, thereby limiting the exposure on this kind of transaction, as there is no change in the risk limit framework.

- The general wrong-way risk is monitored through stress tests (stress tests based on mono- or multi-risk factors covering all transactions with a given counterparty, relying on scenarios also applicable to global market risk stress tests):
- a quarterly analysis of the stress tests regarding all the counterparties, making it possible to identify the most adverse scenarios linked to a joint deterioration of the quality of the counterparties and the associated positions;
- regarding Systemically Important Financial Institutions (SiFi), a monthly follow-up of dedicated stress tests framed by limits.

### 4.5. HEDGING OF CREDIT RISK

### **Guarantees and collateral**

The Group uses credit risk mitigation techniques both for 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.

The Group proactively manages its risks by diversifying guarantees: 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).

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

The amount of guarantees and collateral is capped at the amount of outstanding loans less provisions, i.e. EUR 265.08 billion at 31<sup>st</sup> December 2016 (compared with EUR 248.59 billion at 31<sup>st</sup> December 2015), of which EUR 131.68 billion for retail customers and EUR 133.39 billion for other types of counterparty (compared with EUR 128.74 billion and EUR 119.85 billion at 31<sup>st</sup> December 2015, respectively).

The outstanding loans covered by these guarantees and collateral correspond mainly to loans and receivables in the amount of EUR 222.10 billion at 31<sup>st</sup> December 2016, and to off-balance sheet commitments in the amount of EUR 39.01 billion (compared with EUR 207.95 and EUR 37.06 billion at 31<sup>st</sup> December 2015, respectively).

Guarantees and collateral received for outstanding loans not individually impaired amounted to EUR 2.21 billion at 31<sup>st</sup> December 2016 (versus EUR 2.11 billion at 31<sup>st</sup> December 2015), of which EUR 1.21 billion for retail customers and EUR 0.99 billion for other types of counterparty (versus EUR 1.24 billion and EUR 0.87 billion at 31<sup>st</sup> December 2015, respectively).

Guarantees and collateral received for individually impaired loans amounted to EUR 7.32 billion at 31<sup>st</sup> December 2016 (versus EUR 6.69 billion at 31<sup>st</sup> December 2015), of which EUR 3.42 billion for retail customers and EUR 3.90 billion for other types of counterparty (versus EUR 3.13 billion and EUR 3.56 billion at 31<sup>st</sup> December 2015, respectively). These amounts are capped at the amount of outstanding individually impaired loans.

# Use of credit derivatives to manage corporate concentration risk

Within Corporate and Investment Banking, the Credit Portfolio Management (CPM) team is responsible for working in close cooperation with the Risk Division and the core businesses to reduce excessive portfolio concentrations and react quickly to any deterioration in the creditworthiness of a particular counterparty. CPM has now been merged with the department responsible for managing scarce resources for the credit and loan portfolio.

The Group uses credit derivatives 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. Individual protection is essentially purchased under the over-concentration management policy. For example, the ten most hedged names account for 96% of the total amount of individual protections purchased (versus 90% at 31<sup>st</sup> December 2015). The notional value of Corporate credit derivatives (Credit Default Swaps, CDS) purchased for this purpose is booked in off-balance sheet commitments under guarantee commitments received.

Total outstanding purchases of protection through Corporate credit derivatives decreased to EUR 0.8 billion at end-December 2016 (compared to EUR 0.7 billion at end-December 2015).

The amounts recognised as assets (EUR 3.9 billion at 31<sup>st</sup> December 2016 versus EUR 7.1 billion at 31<sup>st</sup> December 2015) and liabilities (EUR 4.2 billion at 31<sup>st</sup> December 2016 versus EUR 7.3 billion at 31<sup>st</sup> December 2015) correspond to the fair value of credit derivatives mainly held under a transaction activity but also under the aforementioned protection purchases.

In 2016, the Credit Default Swap (CDS) spreads from European investment-grade issuances (iTraxx index) widened during the first half of the year before tightening back to beginning of the year opening levels. The overall sensitivity of the portfolio to spreads widening declined, since the average maturity of protection is now much shorter.

All protection was purchased from bank counterparties (from now on mainly through clearing houses) with ratings of BBB+ or above, the average being AA- The Group is also careful to avoid an excessive concentration of risks with respect to any particular counterparty

# Mitigation of counterparty risk linked to market transactions

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

Accordingly, at 31<sup>st</sup> December 2016, most over-the-counter (OTC) transactions were secured: by amount<sup>(1)</sup>, 65% of transactions with positive mark to market (collateral received by Societe Generale) and 72% of transactions with negative mark to market (collateral posted by Societe Generale).

Management of OTC collateral is monitored on an ongoing basis in order to minimise operational risk:

- the exposure value of each collateralised transaction is certified on a daily basis;
- specific controls are conducted to make sure the process goes smoothly (settlement of collateral, cash or securities; monitoring of suspended transactions, etc.);
- all outstanding secured transactions are reconciled with those of the counterparty according to a frequency set by the regulator (mainly on a daily basis) in order to prevent and/or resolve any disputes on margin calls;
- any legal disputes are monitored daily and reviewed by a committee.

Moreover, regulations encourage or stipulate that a greater number of OTC derivative instruments be cleared through clearing houses certified by competent authorities and subject to prudential regulations. In this context, the European Market Infrastructure Regulation (EMIR) in 2012 published various measures on derivatives market participants in order to improve the stability and transparency of this market. Specifically, the EMIR requires the use of central counterparties for products deemed sufficiently liquid and standardised, the reporting of all derivative products transactions to a trade repository, and the implementation of risk mitigation procedures (e.g. exchange of collateral, timely confirmation, portfolio compression<sup>(2)</sup>, etc.) for OTC derivatives not cleared by central counterparties. Some of these measures are already in effect (portfolio reconciliation, dispute resolution, first clearing obligation), while others are expected to come into force only gradually (exchange of initial margins and variation margins for transactions which are not cleared). In particular, the first step regarding the mandatory exchange of initial margins as defined in the Dodd Frank Act for the non-cleared OTC derivatives transactions with American counterparts came into force on 1st September 2016.

Accordingly, at the end of December 2016, 17% of the OTC transactions (amounting to 45% of the nominal) are cleared through clearing houses.

### **Credit insurance**

In addition to using export credit agencies (for example Coface and Exim) and multilateral organisations (for example the European Bank for Reconstruction and Development – EBRD), Societe Generale 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 sublimits by maturity, and individual limits for each insurance counterparty which must meet strict eligibility criteria.

The implementation of such a policy contributes overall to a sound risk reduction.

<sup>(1)</sup> Excluding OTC deals cleared in clearing houses.

<sup>(2)</sup> Process which consists in (i) identifying the deals for which risks can be offset, and (ii) replacing them by a lower number of transactions, while keeping the same residual exposure.

### 4.6. IFRS 9 ORGANISATION

# General concepts of IFRS 9 debt instruments provisioning

A loss allowance will be recognised for expected credit losses on debt instruments that will be classified in financial assets at amortised cost or fair value through equity under new IFRS 9, finance leases, loan commitments and financial guarantees as of January 1st, 2018.

The loss allowance will be measured at an amount equal to 12month expected losses and will be increased to an amount equal to the lifetime expected credit losses as soon as the credit risk has deteriorated significantly since inception.

Therefore the main change is the recognition of a loss allowance on both loans and debt securities at inception notwithstanding the quality of the credit risk.

### NEW APPROACH

Debts instruments will be allocated to three categories according to the gradual deterioration of their credit risk since initial recognition and impairment will be booked to each of these categories as follows:

#### Stage 1

- All financial assets in question are initially recognised in this category.
- A loss allowance will be recorded at an amount equal to 12-month expected credit losses.

#### Stage 2

- If the **credit risk on a financial asset has significantly increased** since initial recognition, the asset will be transferred to this category.
- The loss allowance for the financial asset will then be increased to the level of its **lifetime expected credit losses**.
- Interest income will be recognised pro rata in the income statement using the effective interest rate method applied to the gross carrying amount of the asset before impairment.

#### Stage 3

- Financial assets identified as being **credit-impaired** (according to the same criteria used to downgrade to doubtful debt) will be transferred to this category.
- The loss allowance for credit risk will continue to be measured at an amount equal to the **lifetime expected credit losses**, adjusted if necessary to take into account any additional deterioration in credit risk.
- Interest income will then be recognised in the income statement according to the effective interest rate method applied to the net carrying amount of the asset after impairment.

### DEFINITIONS

#### Significant increase in credit risk

A significant increase in credit risk is key in measuring the expected credit losses, because it automatically implies an increase in provisions and a transfer between stage 1 and stage 2.

The Group must take into account all available past due and forward-looking information as well as the potential consequences of a change in macroeconomic factors at a portfolio level, so that any significant increase in the credit risk on a financial asset may be assessed as early as possible. A significant increase in credit risk will be assessed on an instrumentby-instrument basis, but may also be assessed on the basis of consistent portfolios of similar assets, where individual assessment is not relevant. A counterparty-based approach (applying the default contagion principle to all the counterparty's outstanding loans) will also be possible if it gives similar results.

There will be a rebuttable presumption that the credit risk on a financial asset has increased significantly where the contractual payments on the asset are more than 30 days past due. However, this is an ultimate indicator, as the Group may have determined through advanced indicators, such as behavioural scores, loan-to-value, as well as all reasonable and supportable forward-looking information, that there have been significant increases in credit risk before contractual payments are more than 30 days past due.

Application of IFRS 9 will not alter the definition of default currently used to determine whether or not there is objective evidence of impairment of a financial asset. An asset will notably be presumed in default if one or more contractual payments are more than 90 days past due.

#### One-year EL

The one-year horizon measurement takes into account all available past due and reasonable and supportable forward-looking information, as well as the potential consequences of a change in macroeconomic factors. As these expected losses will not be calculated through the credit cycle, the result may become more pro-cyclical than it currently is.

While relying on the Basel framework, the IFRS 9 expected credit losses are different from the regulatory expected credit losses (i.e., lack of conservative bias, forward-looking perspective included in IFRS 9).

#### Lifetime EL

The calculation of expected losses takes into account historical data, current conditions and reasonable and supportable forward-looking information, as well as relevant macroeconomic factors until the contract maturity.

# Description of provisioning under IAS 39 and transition to IFRS 9

**Definition of financial assets:** the assessment and measurement of provisioning for assets recognised at amortised cost and available-for-sale assets are detailed on page 359 and 360 of the registration document.

**Definition of default:** application of IFRS 9 will not alter the definition of default on page 57 of the registration document.)

**Collective provisions,** as defined on page 57 of the registration document, will be replaced by the one-year horizon and lifetime provisions.

At a general level,

- Financial assets where there has been a significant deterioration in credit since origination without any objective evidence of individual credit losses will probably be classified in Stage 2.
- Financial assets on counterparties linked to economic sectors considered as being in crisis further to the occurrence of loss events, or on geographical sectors or countries in which a deterioration of credit risk has been assessed will be classified either in Stage 1 or Stage 2 depending on their individual credit risk, taking into account the deterioration in the sector or country since the previous balance sheet date.

### Implementation strategy

#### GOVERNANCE

A joint Risk and the Finance division IFRS 9 program was launched in 2013 to assess and implement the future regulatory requirement, relying on pillars and entities organization.

The Risk division, Finance division and each of the three pillars have a specific program team to monitor the work plan required to ensure compliance with IFRS 9.2, in keeping with the framework defined by the group program team.

Commencing early in January 2016, exchanges with external auditors and regulators accelerated at the end of 2016. It is expected that the discussions will intensify further during 2017.

### **PROGRAM MILESTONES**

The group program is responsible for calculating credit risk provision, compliant with the new accounting standard for January 1st, 2018, including regulatory, accounting and management monitoring reporting requirements.

As disclosed at the end of 2015, the bank commenced implementation of the banking and organizational framework in 2016, in the following areas in particular:

- Implementation of the methodological framework in all entities
- Start of the IT developments in order to begin the testing period as of beginning of 2017
- First description of the organizational processes, including operational governance.

Building on these steps, the group intends to fulfil its aim stated at end-2015, namely to complete practically the entire program by the end of the third quarter of 2017 and conduct a general rehearsal.

#### **PROJECT ORGANISATION**

There was no change to the structure of the project in two main streams, a banking stream and an IT and process stream, in 2016.

### In 2016, the banking stream continued work on the following areas:

- The rules for assessing credit risk deterioration:
- Use of the internal credit rating system, identical to the system used in Basel to calculate risk-weighted assets (RWA), with a specific focus on the rating process;
- Definition of normative rules to transfer all the contracts of a counterparty to Stage 2
- Use and improvement of the watchlist system in addition to an automatic threshold which measures the significant credit deterioration of rating or scores to create a link between rating (or score) deterioration, watch list and the provisioning amount.
- Determination of one-year and lifetime probabilities of default (PD), factoring in macroeconomic forecasts to take the credit cycle into account. The main challenge is to build in multiple macroeconomic scenarios to optimise anticipation of future credit deterioration.
- Loss given default (LGD) rates using either the existing Basel system or loss rates of defaulted financial assets.

- Calibration and validation of the methodological framework will continue throughout 2017 in order to clearly understand the new IFRS 9 provisioning models. This stage involves simulating management rules and calibration methods (as consistent as possible with the Basel rules) to determine the combinations best suited to fulfilling both the normative and business criteria.
- Other streams will be launched in addition to these themes, such as the definition of backtests, surveys to improve understanding of the intrinsic procyclicality of IFRS 9 models and the definition of governance for updating the models in compliance with year-end closing.

### During 2016, the general principles of implementation were decided and will be rolled out as follows:

- Centralisation of the provisioning models, even though they are implemented taking into account the specific characteristics of entities
- Use of a common calculator for the bulk of the assets
- Central collection of assets and their provisions to address the many communication, explanatory and regulatory reporting requirements of calculating the provisions
- Central reporting to comply with financial communication and regulatory reporting requirements.

### IMPACT ON REGULATORY CAPITAL

Because of the expected volatility and forward–looking nature of the new provisioning, the project started a simulation stream in mid-2015. As of now, the results confirm that Société Générale is in the range published by the first EBA Quantitative Impact Study (QIS). However these results must be treated with caution because they are based on current calibration and methodology. The calculation will be refined throughout 2017.

Lastly, the behaviour of the IFRS 9 model in different macroeconomic scenarios will also be examined in 2017, together with the IFRS 9 impact on regulatory capital.

### 4.7. RISK MEASUREMENT AND INTERNAL RATINGS

In 2007, Societe Generale obtained authorisation from its supervisory authorities to apply the Internal Ratings-Based (IRB) approach to most of its exposures in order to calculate the capital requirements in respect of credit risk.

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

Exposures treated under the Standardised approach for Credit Risk correspond to 25% of SG Group credit risk exposures. These exposures are mostly composed of central counterparties, as well as retail and corporate exposures in International Banking and Financial Services entities.

On retail and corporate portfolios, the share of external ratings available is extremely limited.

### TABLE 17: BREAKDOWN OF EAD BY THE BASEL METHOD

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 regulator ACPR (see appendix, p.199).

In the internal process for the calculation of RWA, the availability of a rating potentially issued by the major rating agencies (S&P, Moody's, Fitch) is checked and a rating by the local central bank may also be tested.

Beyond such obligor rating mapping tables, on this perimeter, possibility of using external ratings granted to specific issuing programmes or facilities is almost inexistant.

	31.12.2016	31.12.2015
IRB	75%	77%
Standard	25%	23%
Total	100%	100%

### TABLE 18: SCOPE OF APPLICATION OF THE IRB AND STANDARD APPROACHES FOR THE GROUP

	IRB Approach	Standard Approach
French Retail Banking	Majority of portfolios	Some retail customer portfolios, including those of the SOGELEASE subsidiary
International Retail Banking and Financial Services	The subsidiaries KB (Czech Republic), CGI, Fiditalia, GEFA and SG Finans, SG leasing SPA and Fraer Leasing SPA, SGEF Italy	The other subsidiaries
	Majority of Corporate and Investment Banking portfolios	
Global Banking and Investor Solutions	As for Private Banking, Securities Services and Brokerage, mainly the Retail portfolios of the following subsidiaries: SG Hambros, SGBT Luxembourg, SGBT Monaco, SG Private Banking Suisse	For Private Banking, Securities Services and Brokerage, the exposures granted to banks and companies
Corporate Centre	Majority of portfolios	-

# General framework of the internal approach

To calculate its capital requirements under the IRB method, Societe Generale estimates the Risk-Weighted Asset (RWA) and the Expected Loss (EL), a loss that may be incurred due to the nature of the transaction, the quality of the counterparty and all measures taken to mitigate risk.

To calculate its RWA, Societe Generale uses its own 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, income receivables, 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 Societe Generale Group also takes into account:

- the impact of guarantees and credit derivatives with the substitution of the PD, the LGD and the risk-weighting calculation of the guarantor with 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;
- collaterals used as guarantees (physical or financial). This impact is factored either at the level of the LGD models in the pools concerned or on a line-by-line basis.

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 supervisor) to a portfolio of specialised lending exposures granted to the French subsidiary Franfinance Entreprises

Moreover, the Group has received 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.

Besides the capital requirement calculation objectives under the IRBA 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 participate in the setting of approval limits granted to business lines and the Risk Department.

# Credit risk measurement for wholesale clients

The Group's credit risk measurement system, which estimates internal Basel parameters, uses a quantitative evaluation mechanism coupled with an expert judgement.

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

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

### RATING SYSTEM

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

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

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

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

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

# TABLE 19: SOCIETE GENERALE'S INTERNAL RATING SCALE AND CORRESPONDING SCALES OF RATING AGENCIES

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

### 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 geographical location of the transaction or of the counterparty, depending on the existence or not of collateral and its nature. This makes it possible to define homogenous risk pools, notably in terms of recovery, procedures and the legal environment.

These estimates are built on a statistical basis when the number of loans in default is sufficient. They are based in this case on the observation of recovery data over a long period.

When the number of defaults is insufficient, the estimate is revised or determined by an expert.

# CCF MODELS (CREDIT CONVERSION FACTOR)

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

Modelled Parameter	Portfolio/Category of Basel assets	Number of models	Model and methodology Number of years default/loss
		WHOLESALE CLIENTS	•
	Sovereigns	Expert rating.	Expert-type model, use of the external ratings of agencies. Low default portfolio.
	Public sector entities	4 models according to the geographical regions (FR-US-Czech Rep Other).	Statistical-type models (regression) for the rating process, based on the combination of financial ratios and a qualitative questionnaire. Low default portfolio.
	Financial institutions	5 models according to the type of counterparty: Banks, Insurances, Funds, Financial intermediaries, Funds of Funds.	Expert-type models based on a qualitative questionnaire. Low default portfolio.
Probability of default (PD)	Specialised financing	5 models according to the type of transaction.	Expert-type models based on a qualitative questionnaire.
	Large corporates	9 models according to the geographical regions.	Statistical-type 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	12 models according to the size of companies and the geographical region.	Statistical-type 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.
	Public sector entities - Sovereigns	4 models – According to the 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	>20 models Flat-rate approach according to the type of collateral.	Calibration based on historical data adjusted by the expert judgments. Losses observed over a period of more than 10 years.
	Large corporates - Discount Approach	12 models Discount approach according to the type of recoverable collateral.	Calibration based on historical market data adjusted by the expert judgments. Losses observed over a period of more than 10 years.
Loss given default (LGD)	Small and medium- sized companies	13 models Flat-rate approach according to the type of collateral or unsecured.	Calibration based on historical data adjusted by the expert judgments. Losses observed over a period of more than 10 years.
	Project financing	10 models Flat-rate approach according to the project type.	Calibration based on historical data adjusted by the expert judgments. Losses observed over a period of more than 10 years.
	Financial institutions	8 models Flat-rate approach according to the type of counterparty: banks, insurances, funds, etc. and the nature of the collateral.	Calibration based on historical data adjusted by the expert judgments. Losses observed over a period of more than 10 years.
	Other specific portfolios	6models: factoring, leasing with option to purchase and other specific cases.	Calibration based on historical data adjusted by the expert judgments. Losses observed over a period of more than 10 years.
Credit conversion factor (CCF)	Large corporates	3 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 transaction	1 model by slotting.	Statistical model based on expert opinion and a qualitative questionnaire. Low default portfolio.

### TABLE 20: WHOLESALE CLIENTS - MODELS AND PRINCIPAL CHARACTERISTICS OF MODELS USED

### BACKTESTS

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

The compliance of this system is based on the consistency between the parameters used and the long-term trends analysed, with safety margins that take into account areas of uncertainty (cyclicity, volatility, quality of data, etc.). The safety margins applied are regularly estimated, checked and revised if necessary.

The results of backtests can justify the implementation of remedial plans or the application of add-ons if the system is deemed to be insufficiently prudent. The results of backtests, remedial plans and add-ons are presented to the Committee of Experts for discussion and approval (see Governance of the modelling of risks, p. 194).

### TABLE 21: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL PD VALUES - WHOLESALE CLIENTS

	31.12.2016			
Basel Portfolio	Estimated probability of default (EAD-weighted average)	Estimated probability of default* (arithmetic average weighted by receivables)	Historical annual default rate**	
Sovereigns	0.1%	0.8%	0.2%	
Banks	0.3%	2.1%	1.1%	
Public sector entities	0.1%	0.3%	0.1%	
Specialised financing	1.9%	3.0%	2.6%	
Large corporates	1.1%	2.9%	1.6%	
Small and medium-sized companies	3.6%	5.5%	3.7%	

Please note: for 2016, the Probability of Default results are reported with a higher level of granularity, in accordance with the revised guidelines of the EBA publication of 14<sup>th</sup> December 2016 (EBA/GL/2016/11)

\* The performance of the credit system is measured by way of regular backtests, in accordance with regulations. Backtests compare the estimated probability of default (arithmetic average weighted by receivables) with the observed results (the historical annual default rate), which confirms the overall prudence of the rating system

\*\* The historical annual default rate was calculated based on a five-year period, except for Banking and Sovereign portfolios, for which a longer history was used (taking into account the 2008 financial crisis and the 2010 sovereign debt crisis).

# TABLE 22: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL LGD AND EAD VALUES FOR WHOLESALE CLIENTS

	31.12.2016		
Basel portfolio	Estimated LGD*	Actual LGD excluding safety margin	Actual EAD** / estimated EAD
Large corporates	35%	25%	95%
Small and medium-sized companies	40%	36%	

\* Senior unsecured LGD

\*\* Modelled CCF (revolving, term loans), only for defaults

	31.12.2015			
Basel portfolio	Estimated LGD*	Actual LGD excluding safety margin	Actual EAD** / estimated EAD	
Large corporates	34%	24%	95%	
Small and medium-sized companies	41%	37%		

\* Senior unsecured LGD

\*\* Modelled CCF (revolving, term loans), only for defaults

### Credit risk measurements of retail clients

### PROBABILITY OF DEFAULT MODELS

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 assets using the IRBA 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 (SCI, Sociétés Civiles Immobilières).

The counterparties of each segment are classified automatically using statistical models in homogenous risk pools, each of which is assigned probabilities of default.

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

### LGD MODELS

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

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

The expected losses are estimated with internal long-term historical recovery data for exposures that have defaulted. These estimates are adjusted with 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 account held by retail and professional customers.

### BACKTESTS

The performance level of the whole 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 rates observed by homogenous risk pools are compared with the probabilities of default. If necessary, the calibrations of probabilities of default are adjusted to preserve a satisfactory safety margin. The discrimination level of the models and changes in the portfolio's composition are also measured.

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

The difference should in this case reflect a sufficient safety margin to take into account a potential economic slowdown, uncertainties about estimation, and changes in the performance of recovery processes. The appropriateness of this safety margin is assessed by a Committee of experts.

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

The results presented below for the PD cover all the portfolios of the Group entities with the exception of Private Banking, where the restructured models are currently awaiting authorisation for use by the supervision authorities.

The exposures to retail customers of subsidiaries specialised in Equipment Financing are integrated into the retail customer portfolio under the "VSB and professionals" sub-portfolio (exposures of GEFA, SGEF Italy, SG Finans).

The figures below aggregate French, Czech, German, Scandinavian and Italian exposures. For all the Basel portfolios of retail clients, the actual default rate over a long period is lower than the estimated probability of default, which confirms the overall conservatism of the rating system.

### TABLE 23: RETAIL CUSTOMERS - MODELS AND PRINCIPAL CHARACTERISTICS OF MODELS USED

Modelled Parameter	Portfolio/Category of Basel assets	Number of models	Model and methodology Number of years of default/loss
		RETAIL CUSTOMERS	
Probability of default (PD)	Residential real estate	12 models according to the entity, the type of guarantee (security, mortgage), the type of counterparty: individuals or professionals / VSB, Real estate investment company (SCI).	Statistical-type model (regression), behavioural score. Defaults observed over a period of more than 5 years.
	Other loans to individual customers	> 20 models according to the entity, the nature and the object of the loan: personal loan, consumer loan, automobile, etc.	Statistical-type model (regression), behavioural score. Defaults observed over a period of more than 5 years.
	Renewable exposures	13 models according to the entity, the nature of the loan: overdraft on current account, revolving credit or consumer loan.	Statistical-type model (regression), behavioural score. Defaults observed over a period of more than 5 years.
	Professionals and very small businesses	14models according to the entity, the nature of the loan: medium and long-term investment credits, short-term credit, automobile, the type of counterparty (individual or Real estate investment company (SCI)).	Statistical-type model (regression or segmentation), behavioural score. Defaults observed over a period of more than 5 years.
Loss given default (LGD)	Residential real estate	12 models according to the entity, the type of guarantee (security, mortgage), the type of counterparty: individuals or professional / 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	> 20 models according to the entity, the nature and the object of the loan: personal loan, consumer loan, automobile, 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	13 models according to the entity, the 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	13 models according to the entity, the nature of the loan: medium and long-term investment credits, short-term credit, automobile, the 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	10 calibrations by entities for revolving products and personal overdrafts.	Models calibrated by segments over a period of observation of defaults of more than 5 years.
Expected Loss (EL)	Private Banking exposures	PD and LGD derived from loss observations.	Models restructured into a PD/LGD based approach. Pending authorisation for use by supervision authorities.

### TABLE 24: COMPARISON OF ESTIMATED RISK PARAMETERS: ESTIMATED AND ACTUAL PD VALUES - RETAIL CUSTOMERS

	31.12.2016			
Basel portfolio	Estimated probability of default (EAD-weighted average)	Estimated probability of default* (arithmetic average weighted by receivables)	Historical annual default rate (5-year historical period	
Real estate loans**	1.4%	1.4%	1.2%	
Other loans to individual customers	3.5%	4.7%	4.4%	
Revolving credit	5.5%	5.5%	3.4%	
VSB and professionals	4.6%	6.2%	5.8%	

\* The performance of the credit system is measured by way of regular backtests, in accordance with regulations. Backtests compare the estimated probability of default (arithmetic average weighted by receivables) with the observed results (the historical annual default rate), which confirms the overall prudence of the rating system. \*\* Guaranteed and non-guaranteed exposures.

### TABLE 25: COMPARISON OF RISK PARAMETERS: ESTIMATED AND ACTUAL LGD AND EAD VALUES – RETAIL CUSTOMERS

	31.12.2016								
Basel Portfolio	Estimated LGD*	Actual LGD excluding safety margin	Actual EAD** / estimated EAD						
Real estate loans (excl. guaranteed exposures)	17%	13%	_						
Revolving credits	43%	39%	71%						
Other loans to individual customers	26%	22%	-						
VSB and professionals	26%	22%	77%						
Total Group Retail Customers*	24%	20%	73%						

\* Excluding guaranteed exposures

\*\* Revolving credits and current accounts of individual and professional customers

	31.12.2015								
Basel Portfolio	Estimated LGD*	Actual LGD excluding safety margin	Actual EAD** / estimated EAD						
Real estate loans (excl. guaranteed exposures)	17%	14%	-						
Revolving credits	44%	41%	70%						
Other loans to individual customers	25%	23%	_						
VSB and professionals	26%	21%	65%						
Total Group Retail Customers*	24%	21%	67%						

\* Excluding guaranteed exposures

\*\* Revolving credits and current accounts of individual and professional customers

### Governance of the modelling of risks

Governance consists in developing, validating and monitoring decisions on changes with respect to internal credit risk measurement models. An independent and dedicated validation department within the Risk Division is more specifically responsible for validating the credit models and parameters used for the IRB method and monitoring the use of the rating system. The internal model validation team draws up an annual audit plan specifying the nature and extent of work that needs to be carried out, notably according to regulatory constraints, model risks, issues covered by the model and the strategic priorities of the business lines. It is careful to coordinate its work with the Internal Audit Division to ensure a simultaneous overall review (modelling and banking aspects) of the business scopes requiring such a review. The model validation team is included within the scope subject to inspections by the Internal Audit Division.

The internal validation protocol for new models and annual backtesting is broken down into three stages:

- a preparation stage during which the validation team takes control of the model and the environment in which it is built and/or backtested, ensures that the expected deliverables are complete, and draws up a working plan;
- an investigation stage intended to collect all statistical and banking data required to assess the quality of the models.
   For subjects with statistical components, a review is performed by the independent model control entity, whose conclusions are formally presented to the modelling entities within the framework of a committee (Models Committee);

a validation stage that is structured around a Committee of experts whose purpose is to validate the consistency of the Basel parameters of an internal model from a banking perspective. The Committee of experts is a body reporting to the Group Chief Risk Officer and to the Management of the business lines concerned.

The Committee of experts is also responsible for defining the review guidelines and for revising models at the proposal of the Models Committee. These guidelines take into account the regulatory requirements and economic and financial issues of the business lines. In accordance with the Delegated Regulation (EU) No.529/2014 of 20<sup>th</sup> May 2014 regarding the monitoring of internal models used to calculate capital requirements, changes to the Group's credit risk measurement system are subject to three types of notification to the competent supervisor according to the significant nature of the change, evaluated according to this rule:

- significant changes are subject to a request for authorisation prior to their implementation;
- the supervisor is notified of changes which are not significant according to the criteria defined by the regulation. Barring a negative response within a two-month period, such changes may be implemented;
- the competent authorities are notified of other changes after their implementation at least once annually in a specific report.

### 4.8. CREDIT RISK: QUANTITATIVE INFORMATION

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

Further to the publication of guidelines on prudential disclosure requirements by the European Banking Authority (EBA) in December 2016 (document EBA/GL/2016/11), changes were made in respect of the presentation and scope of the information published.

In particular, equity investments, fixed assets and accruals have been included in the reporting scope. Breakdowns by portfolio now include an "Other" category, 90% of which is made up of such items, as well as securitisation. In addition, exposure classes refer to portfolios of COREP regulatory financial statements, so as to link in with the new EBA requirements on Pillar 3.

### The data for 31<sup>st</sup> December 2015 is presented on a pro forma basis to allow for a comparison between the two years.

At 31<sup>st</sup> December 2015, the Group's pro forma EAD was EUR 806 billion and included equity investments (EUR 7 billion), fixed assets (EUR 5 billion) and accruals (EUR 13 billion).

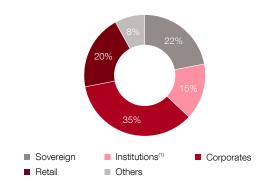
EAD is broken down according to the guarantor's characteristics, after taking into account the substitution effect (unless otherwise indicated).

### Credit risk exposure

At 31<sup>st</sup> December 2016, the Group's Exposure at Default (EAD) amounted to EUR 878 billion.

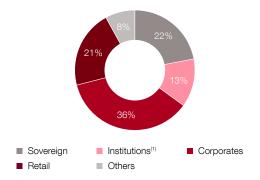
#### CREDIT RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31<sup>ST</sup> DECEMBER 2016

On- and off-balance sheet exposures (EUR 878 billion in EAD)



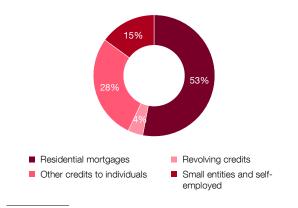
# CREDIT RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31<sup>ST</sup> DECEMBER 2015

On- and off-balance sheet exposures (EUR 806 billion in EAD).



# RETAIL CREDIT RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31<sup>ST</sup> DECEMBER 2016

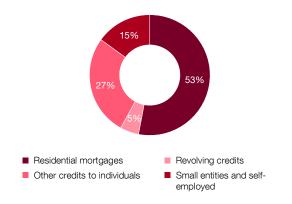
On- and off-balance sheet exposures (EUR 177 billion in EAD)

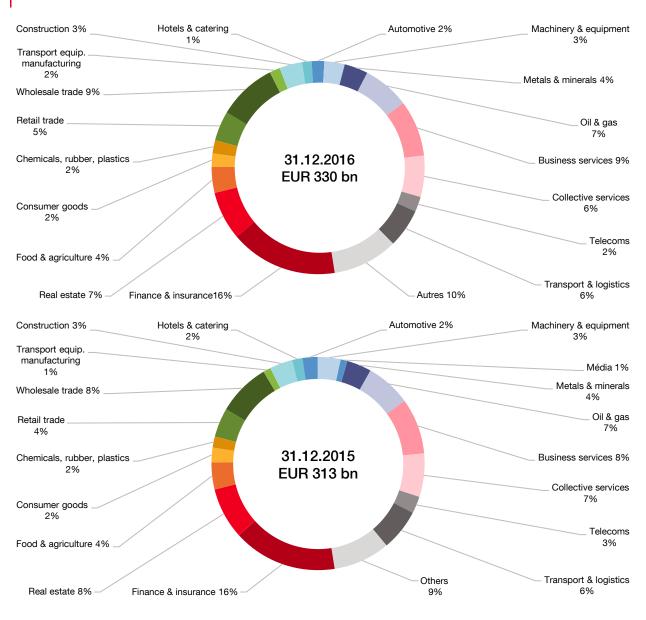


(1) Institutions: Basel classification bank and public sector portfolios

# RETAIL CREDIT RISK EXPOSURE BY EXPOSURE CLASS (EAD) AT 31<sup>ST</sup> DECEMBER 2015

On- and off-balance sheet exposures (EUR 171 billion in EAD)



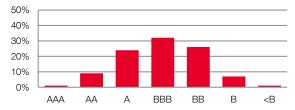


# SECTOR BREAKDOWN OF GROUP CORPORATE EXPOSURE (BASEL PORTFOLIO)

EAD of the Corporate portfolio is presented in accordance with the Basel rules (major corporates, including insurance companies, funds and hedge funds, SMEs, specialist financing, factoring businesses), based on the obligor's characteristics, before taking into account the substitution effect (credit risk scope: debtor, issuer and replacement risk). At 31<sup>st</sup> December 2016, the Corporate portfolio amounted to EUR 330 billion (on- and off-balance sheet exposures measured in EAD). Only the Finance and Insurance sector accounts for more than 10% of the portfolio. The Group's exposure to its ten largest Corporate counterparties accounts for 4% of this portfolio.

#### Corporate and bank counterparty exposure

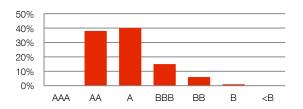
BREAKDOWN OF RISK BY INTERNAL RATING FOR CORPORATE CLIENTS AT 31<sup>ST</sup> DECEMBER 2016 (AS % OF EAD)



The scope includes performing loans recorded under the IRB method (excluding prudential classification criteria, by weight, of specialised financing) for the entire Corporate client portfolio, all divisions combined, and represents EAD of EUR 242 billion (out of total EAD for the Basel Corporate client portfolio of EUR 307 billion according to the guarantor's characteristics, standard method included).

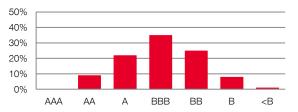
The breakdown by rating of the Societe Generale Group's Corporate exposure demonstrates the sound quality of the

# BREAKDOWN OF RISK BY INTERNAL RATING FOR GROUP BANKING CLIENTS AT $31^{ST}$ DECEMBER 2016 (AS % OF EAD)



The scope includes performing loans recorded under the IRB method for the entire Bank client portfolio, all divisions combined, and represents EAD of EUR 55 billion (out of total EAD for the Basel Bank client portfolio of EUR 130 billion, standard method included). The breakdown by rating of the Societe Generale Group's bank counterparty exposure demonstrates the sound

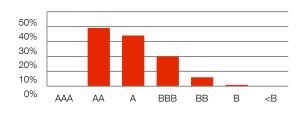
BREAKDOWN OF RISK BY INTERNAL RATING FOR CORPORATE CLIENTS AT  $31^{ST}$  DECEMBER 2015 (AS % OF EAD)



portfolio. It is based on an internal counterparty rating system, presented above as its S&P equivalent.

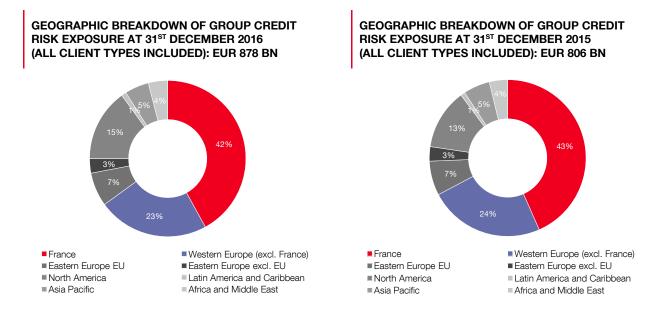
At 31st December 2016, the majority of the portfolio (65% of Corporate customers) had an investment grade rating, i.e. counterparties with an S&P-equivalent internal rating higher than BBB-. Transactions with non-investment grade counterparties are very often backed by guarantees and collateral in order to mitigate the risk incurred.

# BREAKDOWN OF RISK BY INTERNAL RATING FOR GROUP BANKING CLIENTS AT $31^{st}$ DECEMBER 2015 (AS % OF EAD)



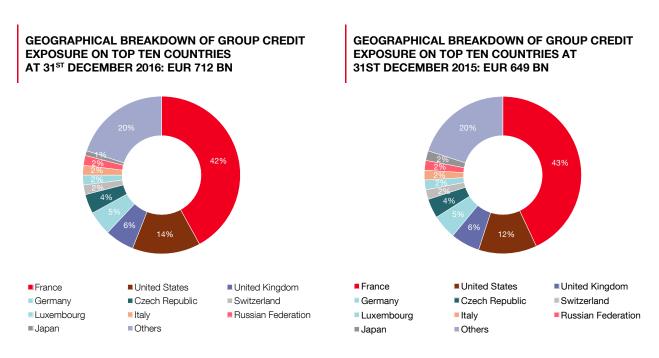
quality of the portfolio. It is based on an internal counterparty rating system, presented above as its S&P equivalent.

At 31<sup>st</sup> December 2016, exposure was concentrated in investment grade counterparties (93% of exposure), as well as in developed countries (92%).



#### Geographic breakdown of Group credit risk exposure

At 31<sup>st</sup> December 2016, 89% of the Group's on- and off-balance sheet exposure was concentrated in the major industrialised countries. Almost half of the overall amount of outstanding loans was to French customers (27% exposure to non-retail portfolio and 15% to retail portfolio).



The Group's exposure on its top ten countries represents 80% of total exposure (i.e. EUR 712 billion of EAD) at 31<sup>st</sup> December 2016, i.e. the same percentage as in 2015 (EUR 649 billion of EAD at 31<sup>st</sup> December 2015).

# TABLE 26: GEOGRAPHICAL BREAKDOWN OF GROUP CREDIT EXPOSURE ON TOP FIVE COUNTRIES BY EXPOSURE CLASS (IN %)

	France		United	States	United K	ingdom	Germ	any	Czech R	Republic	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	
Sovereign	20%	19%	32%	37%	9%	6%	21%	19%	25%	29%	
Institutions	8%	7%	25%	15%	39%	39%	25%	20%	5%	5%	
Corporates	30%	30%	34%	38%	39%	43%	25%	31%	32%	30%	
Retail	36%	37%	0%	0%	5%	6%	21%	21%	34%	32%	
Others	6%	7%	9%	10%	8%	6%	8%	8%	4%	4%	

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

# TABLE 27: CHANGE IN RISK-WEIGHTED ASSETS (RWA) BY METHOD AND EXPOSURE CLASS ON OVERALL CREDIT RISK (CREDIT AND COUNTERPARTY IN EUR M)

	RWA - IRB	RWA - Standard	RWA - Total	Capital requirements - IRB	Capital requirements - Standard	Capital requirements - Total
RWA as at end of previous reporting period (31.12.2015)	174,456	113,552	288,008	13,956	9,084	23,041
Asset size	2,934	(1,365)	1,569	235	(109)	125
Asset quality	(807)	(227)	(1,035)	(65)	(18)	(83)
Model updates	98	0	98	8	0	8
Methodology	0	0	0	0	0	0
Acquisitions and disposals	0	1,129	1,129	0	90	90
Foreign exchange movements	867	1,199	2,065	69	96	165
Other	(2,055)	(659)	(2,713)	(164)	(53)	(217)
RWA as at end of reporting period (31.12.2016)	175,493	113,628	289,121	14,039	9,090	23,130

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

The CVA represented EUR 5.1 billion at 31<sup>st</sup> December 2016 (compared to EUR 5.5 billion at 31<sup>st</sup> December 2015). Credit risk-weighted assets had increased slightly at 31<sup>st</sup> December 2016 compared to the previous year.

This increase is due partly to an increase in volumes and partly to a foreign exchange effect.

Effects are defined as follows:

Asset size: Organic changes in book size and composition (including the origination of new businesses and maturing loans) but excluding changes in book size due to acquisitions and disposal of entities.

Asset quality: Changes in the assessed quality of the institution'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 policy changes, including both revisions to existing regulations and new regulations.

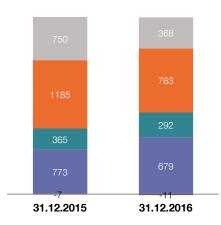
Acquisitions and disposals: Changes in book sizes due to acquisitions and disposal of entities.

Foreign exchange movements: Changes arising from foreign currency translation movements.

Other: This category must be used to capture changes that cannot be attributed to any other category.

### Net cost of risk

#### CHANGE IN GROUP NET COST OF RISK (IN EUR M)



French Retail Banking

Global Banking and Investor Solutions

International retail banking and Financial Services

Corporate Centre

Litigation cost of risk

The Group's net cost of risk in 2016 amounted to EUR -2,091 million, down -31.8% vs. 2015, reflecting the improvement year after year in the Group's risk profile. The provision for litigation issues totalled EUR 2 billion at end-2016, further to an additional net provision of EUR 350 million in respect of 2016.

The commercial cost of risk (excluding litigation issues, in basis points for the average assets at the beginning of the calendar year preceding the closing date, including operating leases) continued to decline. It totalled 37 basis points for 2016 (vs. 52 basis points in 2015).

- In French Retail Banking, the commercial cost of risk was down, at 36 basis points for 2016 vs. 43 basis points for 2015, reflecting the quality of the loan approval policy.
- At 64 basis points for 2016 (vs. 102 basis points for 2015), International Retail Banking and Financial Services' cost of risk was substantially lower, testifying to the effectiveness of the policies implemented to improve the quality of the loan portfolio.

More specifically, the cost of risk in Russia and Romania was significantly lower, dropping from 293 and 185 basis points respectively in 2015 to 182 and 98 basis points in 2016.

 Global Banking and Investor Solutions' cost of risk was at 20 basis points for the year (vs. 27 basis points for 2015)

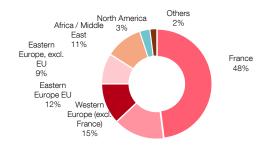
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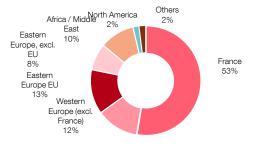
#### Specific provisions and impairments for credit risks

Impairments and provisions for credit risks are primarily booked for doubtful and disputed loans (customer loans and receivables, amounts due from banks, operating leases, lease financing and similar agreements).

#### BREAKDOWN OF DOUBTFUL AND DISPUTED LOANS BY GEOGRAPHIC REGION AT 31<sup>st</sup> DECEMBER 2016

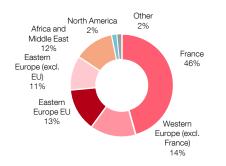
#### BREAKDOWN OF DOUBTFUL AND DISPUTED LOANS BY GEOGRAPHIC REGION AT 31<sup>ST</sup> DECEMBER 2015



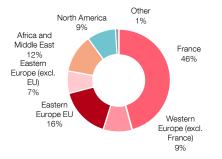


At 31st December 2016, these individually impaired loans amounted to EUR 23.9 billion (versus EUR 24.6 billion at 31st December 2015).

#### BREAKDOWN OF PROVISIONS AND IMPAIRMENTS BY GEOGRAPHIC REGION AT 31<sup>st</sup> DECEMBER 2016



#### BREAKDOWN OF PROVISIONS AND IMPAIRMENTS BY GEOGRAPHIC REGION AT 31<sup>st</sup> DECEMBER 2015



At 31<sup>st</sup> December 2016, these loans were provisioned or impaired for an amount of EUR 13.6 billion (vs. EUR 14.3 billion at 31st December 2015).

#### Impairments on groups of homogeneous assets

At 31<sup>st</sup> December 2016, the Group's provisions for groups of homogeneous assets amounted to EUR 1.5 billion (vs. EUR 1.4 billion at 31<sup>st</sup> December 2015).

# TABLE 28: PROVISIONING OF DOUBTFUL LOANS (IN EUR BN)

	31.12.2016	31.12.2015
Gross book outstandings	479.1	461.4
Doubtful loans	23.9	24.6
Gross doubtful loans ratio	5.0%	5.3%
Specific provisions	13.7	14.3
Provisions on groups of homogeneous assets	1.5	1.4
Gross doubtful loans coverage ratio (Overall provisions/doubtful loans)	64%	64%

Scope: customer loans, amounts due from banks, operating leases, lease financing and similar agreements.

Detail regarding guarantees and collateral is available on p. 60.

### **Restructured debt**

For the Societe Generale Group, "restructured" debt refers to loans whose 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 retain or develop a business relationship, in accordance with credit approval rules in force and without giving up any of the principal or accrued interest. Any situation leading to debt restructuring entails placing the customers in question in the Basel default category and classifying the loans themselves as impaired.

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 a minimum of one year.

Restructured debt totalled EUR 6.85 billion at 31st December 2016.

#### TABLE 29: RESTRUCTURED DEBT (IN EUR M)

	31.12.2016	31.12.2015
Non-performing restructured debt	5,819	6,036
Performing restructured debt	1,031	992
Total restructured debt	6,850	7,028

### Loans and advances past due but not individually impaired

Outstanding loans in the on-balance-sheet credit portfolio are broken down as follows:

#### TABLE 30: LOANS AND ADVANCES PAST DUE BUT NOT INDIVIDUALLY IMPAIRED (IN EUR BN)

		;	31.12.2016	;		31.12.2015						
		Between 31 and 90 days	91 and	More than180 days	Total	Between 1 and 30 days	31 and 90	91 and	More than180 days	Total		
Due from banks (A)	0.03	0.02	0.00	0.00	0.05	0.04	0.03	0.01	0.00	0.08		
Sovereign (B)	0.06	0.00	0.00	0.00	0.06	0.02	0.08	0.03	0.00	0.13		
Corporates (C)	1.74	0.64	0.14	0.22	2.74	1.03	1.20	0.18	0.29	2.70		
Retail (D)	2.08	0.76	0.06	0.04	2.94	2.08	0.83	0.08	0.08	3.07		
Customer loans (E = B + C + D)	3.88	1.40	0.20	0.26	5.74	3.13	2.11	0.29	0.37	5.90		
Total (F = A + E)	3.91	1.42	0.20	0.26	5.79	3.17	2.14	0.30	0.37	5.98		

The amounts presented in the table above include loans and advances that are past due for technical reasons, which primarily affect the "less than 31 days old" category. Loans past due for technical reasons are loans that are classified as past due on account of a delay between the value date and the date of recognition in the customer's account.

Total declared past due loans not individually impaired includes all receivables (outstanding principal, interest and past due amounts) with at least one recognised past due amount. These outstanding loans can be placed on a watch list as soon as the first payment is past due.

At 31st December 2016, outstanding performing assets with past due amounts accounted for 1.3% of unimpaired on-balance sheet assets excluding debt instruments and including loans that are past due for technical reasons (for a total of EUR 440.10 billion). The amount is stable compared to 31st December 2015 (1.4% of outstanding performing assets excluding debt/securities).

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

#### Introduction

- The additional quantitative disclosures related to credit risk in the following tables enhance the information of the previous section under Pillar 3 (Credit risk: quantitative information).
- Following the release of Guidelines related to prudential disclosures by the European Banking Authority in December 2016 (EBA/GL/2016/11), changes have been impelemented to the presentation and scope in the published items.
- In particular, equity securities, fixed assets and accruals have been included in the reporting scope. Breakdowns by portfolio show a category labelled "other" which is 90% composed of previously quoted items as well as securitisation instruments.
- In order to make the link with the EBA's new regulatory requirements on Pillar 3, exposure classes refer to portfolios of COREP statements.
- References in parentheses in the table titles are in line with the formats required by the EBA for revised Pillar 3 (EBA/GL/2016/11).
- In this section, the amounts indicated correspond to global credit risk which is composed of credit and counterparty risk.
- These tables present detailed information on the bank's global credit risk, notably with regard to total exposure, exposure at default and risk-weighted assets. The key variables in these tables, in addition to the exposure at default (EAD), the probability of default (PD) and the loss

given default ratio (LGD) explained in the previous section, are the following:

- Exposure: defined as all assets (e.g. loans, receivables, accruals, etc.) associated with market or customer transactions, recorded on and off-balance sheet;
- 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);
- Net exposure: corresponds to initial exposure on a net basis, net of specific and general provisions under the internal approach and specific provisions under the standardised approach.
- Risk Weighted-Assets (RWA): are computed from the exposures and the associated level of risk, which depends on the debtors' credit quality.
- The data for 31<sup>st</sup> December 2015 is presented on a pro forma basis to allow for a comparison between the two years.

As of 31 December 2015, the Group's pro forma EAD is EUR 806 billion (versus EUR 787 billion before pro forma). This EUR 19 billion change stems from the extended scope equity securities have been included (EUR 7 billion), as well as the fixed assets (5 billion Euros) and accruals (EUR 7 billion). A simplified view of credit risk exposures by exposure class is presented below. Further details are available in the appendix (p. 203).

### TABLE 31: EXPOSURE CLASSES

Sovereign	Claims or contingent claims on sovereign governments, regional authorities, local authorities or public sector entities as well as on multilateral development banks and international organizations
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 m.
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 m.
Retail	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.

### Breakdown of global credit risk - Overview

EAD is broken down by guarantor after taking substitution effects into account (unless otherwise specified).

The overall increase in exposure and EAD in 2016 includes all categories.

On Sovereign, the change in the exposure is due in particular to the Group's liquidity management.

On Institutions, it is essentially explained by exposure to clearing houses.

For Corporates the increase mainly stems from a volume effect.

The growth in the Retail exposure class is partly due to an increase in personal real estate loans in France.

# TABLE 32: CREDIT RISK EXPOSURE. EXPOSURE AT DEFAULT (EAD) AND RISK-WEIGHTED ASSETS (RWA) BY APPROACH AND EXPOSURE CLASS

					31.12.2016						
(In EUR m)		IRB		Standard			Total			Average (1)	
Exposure Class	Exposure	EAD	RWA	Exposure	EAD	RWA	EAD	RWA	Exposure	RWA	
Sovereign	177,800	186,023	6,164	9,988	11,159	9,326	187,788	197,182	15,490	186,847	16,295
Institutions	59,796	54,563	10,277	77,067	75,655	5,744	136,863	130,218	16,020	126,802	15,845
Corporates	344,892	251,177	110,695	71,278	55,421	47,396	416,169	306,598	158,091	407,058	157,544
Retail	148,051	147,007	29,490	39,425	30,079	20,905	187,475	177,086	50,395	184,810	49,898
Others	23,577	22,626	18,868	50,745	44,447	30,257	74,322	67,073	49,125	70,965	48,054
Total	754,116	661,396	175,493	248,502	216,761	113,628	1,002,618	878,158	289,121	976,482	287,636

(1) The average exposure and RWA are determined by aggregating the total gross exposure and RWA at the end of the last four quarters and dividing the result by 4.

		31.12.2015											
(In EUR m)	IRB			S	Standard			Total			Average (1)		
Exposure Class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	RWA		
Sovereign	159,086	169,253	5,849	10,609	11,457	10,258	169,695	180,710	16,107	165,038	16,397		
Institutions	55,906	51,045	10,596	46,455	49,867	5,672	102,361	100,912	16,268	104,882	16,567		
Corporates	330,262	235,400	108,962	77,109	55,480	48,326	407,370	290,879	157,287	411,349	156,283		
Retail	145,240	143,955	28,982	35,205	27,244	19,063	180,445	171,199	48,045	177,295	49,365		
Others	22,428	21,181	20,068	48,436	41,583	30,232	70,864	62,764	50,300	71,957	50,775		
Total	712,922	620,834	174,456	217,814	185,631	113,551	930,736	806,465	288,007	930,522	289,387		

<sup>(1)</sup> The average exposure and RWA are determined by aggregating the total gross exposure and RWA at the end of the last four quarters and dividing the result by 4.

These two years present the data without the CVA (Credit Value Adjustment), which represents EUR 5.1 billion as at 31st December 2016 (vs. EUR 5.5 billion as at 31st December 2015).

# TABLE 33: RETAIL CREDIT RISK EXPOSURE, EXPOSURE AT DEFAULT (EAD) AND RISK-WEIGHTED ASSETS (RWA) BY APPROACH AND EXPOSURE CLASS

		21.10.0016												
					3	1.12.2016								
		Retail portfolio												
(In EUR m)		IRB		S	tandard			Total		Averag	je <sup>(1)</sup>			
Exposure Class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	RWA			
Residential mortgages	94,008	93,712	13,326	5,715	16	12	99,723	93,728	13,339	98,464	13,359			
Revolving credits	6,023	5,500	2,407	4,405	2,443	1,835	10,428	7,943	4,242	10,497	4,241			
Other credits to individuals	30,695	30,581	8,595	20,181	18,957	14,083	50,876	49,539	22,678	49,379	21,934			
Other - small entities or self employed	17,325	17,214	5,161	9,124	8,663	4,975	26,449	25,877	10,136	26,470	10,364			
Total	148,051	147,007	29,490	39,425	30,079	20,905	187,475	177,086	50,395	184,810	49,898			

(1) The average exposure and RWA are determined by aggregating the total gross exposure and RWA at the end of the last four quarters and dividing the result by 4.

					3	1.12.2015							
	Retail portfolio												
(In EUR m)		IRB		S	tandard			Total		Average	e <sup>(1)</sup>		
Exposure Class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	RWA		
Residential mortgages	91,290	91,070	12,858	4,638	15	13	95,928	91,085	12,871	90,086	13,434		
Revolving credits	6,412	5,543	2,416	4,283	2,469	1,852	10,695	8,012	4,268	11,503	4,498		
Other credits to individuals	30,197	30,094	8,489	17,790	16,743	12,572	47,987	46,836	21,061	40,261	20,081		
Other - small entities or self employed	17,342	17,248	5,219	8,494	8,017	4,627	25,836	25,265	9,846	35,445	11,352		
Total	145,240	143,955	28,982	35,205	27,244	19,063	180,445	171,199	48,045	177,295	49,365		

(1) The average exposure and RWA are determined by aggregating the total gross exposure and RWA at the end of the last four quarters and dividing the result by 4.

### Breakdown of global credit risk - Detail

#### TABLE 34: NET EXPOSURE BY EXPOSURE CLASS (CRB-B)

	31.12.2016	31.12.2015
	Net value of	Net value of
	exposures at	exposures at
	the end of the	the end of the
(In EUR m)	period	period
Central governments or central banks	177,732	159,021
Institutions	59,765	55,878
Corporates	340,294	326,285
Of which: Specialised Lending	46,078	41,684
Of which: SME	37,963	34,834
Retail	144,438	141,708
Of which: Secured by real estate	93,369	00 905
property	93,309	90,895
Of which: SME	4,599	4,928
Of which: Non-SME	88,770	85,967
Of which: Qualifying Revolving	5,644	6,007
Of which: Other Retail	45,425	44,805
Of which: SME	16,180	16,111
Of which: Non-SME	29,245	28,694
Equity	4,807	5,120
Total IRB approach	727,036	688,013
Central governments or central banks	9,988	10,609
Regional governments or local	1.0.17	1.000
authorities	1,047	1,360
Public sector entities	520	548
Multilateral Development Banks	100	26
Institutions	75,399	44,522
Corporates	71,275	77,104
of which: SME	18,211	17,244
Retail	39,424	35,205
Of which: SME	9,143	8,509
Secured by mortgages on immovable		
property	13,828	12,553
Of which: SME	463	350
Exposures in default	3,180	4,306
Collective investments undertakings		
(CIU)	1,132	877
Equity exposures	1,946	1,974
Other exposures	22,177	20,195
i		
Total SA approach	240,016	209,278

The EBA's recommendation to institutions for this form (EBA Guidelines 2016/11) is to report exposures only for material exposure classes, as described in EBA 2014/14 guidelines. Société Générale opted to present both material and non-material exposure classes. Unused exposure classes are not presented.

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

## TABLE 35: EAD, PERSONAL GUARANTEES (INCLUDING CREDIT DERIVATIVES) AND COLLATERAL BY EXPOSURE CLASS (EXCEPT SECURITISATION)

As at 31st December 2016, on- and off-balance sheet guarantees and collateral amounted to EUR 265.8 billion. The amount of guarantees and collaterals included in the calculation of the Group's capital requirements totaled EUR 184 billion, broken down into:

		31.12.2016				
(In EUR m)	Guarantees	Collaterals	EAD	Guarantees	Collaterals	EAD
Sovereign	5,318	44	197,182	5,666	733	180,710
Institutions	2,222	1,364	130,218	2,334	1,129	100,912
Corporates	21,772	40,703	306,598	23,011	38,605	290,879
Retail	69,845	42,752	177,086	68,195	41,808	171,199
Others	40	228	49,257	69	272	46,685
Total	99,197	85,090	860,342	99,275	82,546	790,385

#### TABLE 36: CORPORATE CREDIT EXPOSURE AT DEFAULT (EAD) BY INDUSTRY SECTOR

	31/12/20	16	31.12.20	15
		Breakdown		Breakdown
(In EUR m)	EAD	in%	EAD	in%
Finance & Insurance	54,936	17.9%	48,768	16.8%
Real estate	23,015	7.5%	22,543	7.7%
Food & agriculture	12,227	4.0%	12,062	4.1%
Consumer goods	6,031	2.0%	5,709	2.0%
Chemicals, rubber, plastics	5,340	1.7%	4,572	1.6%
Retail trade	14,966	4.9%	12,681	4.4%
Wholesale trade	24,757	8.1%	22,444	7.7%
Construction	9,258	3.0%	9,351	3.2%
Transport equip. Manuf.	4,599	1.5%	3,485	1.2%
Hotels and catering	4,052	1.3%	4,094	1.4%
Automobiles	6,082	2.0%	6,961	2.4%
Machinery and equipment	12,058	3.9%	9,231	3.2%
Metals, minerals	9,546	3.1%	10,128	3.5%
Oil and Gas	20,039	6.5%	18,977	6.5%
Business services (including conglomerates)	25,894	8.4%	24,085	8.3%
Collective services	18,170	5.9%	17,968	6.2%
Telecoms	6,556	2.1%	7,005	2.4%
Transport & logistics	16,101	5.3%	16,314	5.6%
Others	32,969	10.8%	34,502	11.9%
Total	306,598	100%	290,879	100%

EAD on the Corporates portfolio amounts to EUR 306 billion and is broken down by guarantor type after the substitution effect (compared to EUR 330 billion broken down by debtor type before the substitution effect).

# TABLE 37: EXPOSURE AT DEFAULT (EAD) BY GEOGRAPHIC REGION AND MAIN COUNTRIES AND BY EXPOSURE CLASS

				31.12.2016			
(In EUR m)	Sovereign	Institutions	Corporates	Retail	Others	Total	Breakdown in%
France	74,687	30,224	111,569	133,230	22,250	371,958	42.4%
United Kingdom	4,812	20,085	20,575	2,502	3,981	51,956	5.9%
Germany	9,225	11,304	11,197	9,544	3,329	44,598	5.1%
Italy	2,868	1,310	6,974	5,259	2,518	18,928	2.2%
Luxembourg	9,672	759	8,063	90	1,668	20,252	2.3%
Spain	1,851	2,223	6,208	281	873	11,436	1.3%
Switzerland	12,364	1,348	5,837	843	215	20,608	2.3%
Other Western European countries	7,534	5,355	21,074	1,458	3,975	39,397	4.5%
Czech Republic	7,837	1,478	9,846	10,396	1,346	30,903	3.5%
Romania	4,587	355	2,218	1,728	2,484	11,372	1.3%
Other Eastern European countries EU	3,725	390	6,859	3,623	3,270	17,867	2.0%
Russia	1,558	1,030	7,331	2,796	3,452	16,167	1.8%
Other Eastern European countries excluding EU	1,106	1,033	4,067	842	880	7,928	0.9%
United States	39,183	31,664	42,764	62	11,334	125,007	14.2%
Other countries of North America	332	2,230	2,274	9	414	5,258	0.6%
Latin America and Caribbean	521	1,062	4,429	95	247	6,353	0.7%
Africa and Middle East	5,135	2,522	17,440	4,057	4,049	33,203	3.8%
Japan	5,733	4,276	1,235	12	250	11,507	1.3%
Asia-Pacific	4,453	11,570	16,639	260	538	33,460	3.8%
Total	197,182	130,218	306,598	177,086	67,073	878,158	100%

Western Europe including France represents two-thirds of the Group's total exposure (Retail banking clients account for only 87% at the end of 2016).

Russia represents less than 2% of total Group EAD.

				31.12.2015			
(In EUR m)	Sovereign	Institutions	Corporates	Retail	Others	Total	Breakdown in%
France	65,130	25,949	105,646	130,444	22,801	349,970	43.4%
United Kingdom	3,210	19,341	21,671	2,767	2,809	49,798	6.2%
Germany	7,832	7,947	12,669	8,511	3,604	40,563	5.0%
Italy	2,976	1,468	7,304	4,677	2,309	18,734	2.3%
Luxembourg	7,835	296	7,055	124	857	16,167	2.0%
Spain	1,429	2,955	6,753	284	713	12,133	1.5%
Switzerland	12,288	772	3,947	796	103	17,906	2.2%
Other Western European							
countries	7,442	5,796	19,331	1,312	3,178	37,059	4.6%
Czech Republic	8,535	1,532	8,965	9,529	1,244	29,805	3.7%
Romania	4,382	317	2,117	1,590	2,560	10,967	1.4%
Other Eastern European							
countries EU	3,254	541	6,412	3,254	3,103	16,565	2.1%
Russia	2,287	868	6,699	2,572	2,819	15,244	1.9%
Other Eastern European							
countries excluding EU	1,054	1,245	4,091	924	1,431	8,745	1.1%
United States	34,527	14,497	36,964	62	10,029	96,080	11.9%
Other countries of North America	777	1,383	2,286	10	309	4,764	0.6%
Latin America and Caribbean	425	843	5,692	118	261	7,339	0.9%
Africa and Middle East	4,135	2,126	16,532	3,913	3,719	30,426	3.8%
Japan	9,581	3,456	1,326	11	358	14,732	1.8%
Asia-Pacific	3,611	9,580	15,420	300	557	29,468	3.7%
Total	180,710	100,912	290,879	171,199	62,764	806,465	100%

TABLE 38: RETAIL EXPOSURE AT DEFAULT (EAD) BY GEOGRAPHIC REGION AND MAIN COUNTRIES

			31.12.20 <sup>-</sup>	16		
(In EUR m)	Residential mortgages	Revolving credits	Others credits to individuals	Others - small entities or self employed	Total	Breakdown in%
France	83,607	6,438	27,840	15,345	133,230	75%
Germany	12	221	4,976	4,336	9,544	5%
Italy	24	67	3,449	1,718	5,259	3%
Other Western European countries	1,577	44	1,704	1,850	5,175	3%
Czech Republic	7,925	375	1,185	910	10,396	6%
Romania	5	344	1,207	173	1,728	1%
Other Eastern European countries EU	103	76	2,731	714	3,623	2%
Russia	81	283	2,402	30	2,796	2%
Other Eastern European countries excluding EU	36	22	611	174	842	0%
North America	20	6	30	14	70	0%
Latin America and Carribbean	14	10	70	1	95	0%
Africa and Middle East	229	41	3,271	516	4,057	2%
Asia-Pacific	95	17	64	97	272	0%
Total	93,728	7,943	49,539	25,877	177,086	100%

	31.12.2015										
(In EUR m)	Residential mortgages	Revolving credits	Others credits to individuals	Others - small entities or self employed	Total	Breakdown in%					
France	81,918	6,542	26,653	15,332	130,444	76%					
Germany	11	193	4,278	4,029	8,511	5%					
Italy	22	82	3,267	1,306	4,677	3%					
Other Western European countries	1,539	38	1,791	1,915	5,283	3%					
Czech Republic	7,032	378	1,069	1,049	9,529	6%					
Romania	4	316	1,100	170	1,590	1%					
Other Eastern European countries EU	84	76	2,511	583	3,254	2%					
Russia	98	278	2,121	75	2,572	2%					
Other Eastern European countries excluding EU	30	37	669	188	924	1%					
North America	24	6	37	6	72	0%					
Latin America and Carribbean	13	10	83	11	118	0%					
Africa and Middle East	227	40	3,185	462	3,913	2%					
Asia-Pacific	83	15	74	140	311	0%					
Total	91,085	8,012	46,836	25,265	171,199	100%					

### TABLE 39: GEOGRAPHICAL BREAKDOWN OF NET EXPOSURES (CRB-C)

					31.12.20	16				
					Net Expos	sure				
(In EUR m)	France	United Kingdom	Germany	Italy	Luxembourg	Spain	Switzerland	Other Western European countries	Czech Republic	Romania
Central governments or central banks	65,640	3,534	6,642	396	10,035	1,007	12,282	6,073	7,158	3,822
Institutions	19,791	5,068	1,726	380	1,916	1,126	1,111	4,571	1,374	24
Corporates	119,229	23,916	17,012	7,581	7,863	7,488	7,195	22,477	10,835	379
Retail	123,598	1,610	3,210	3,622	82	64	641	432	9,782	3
Equity	3,845	133	7	0	367	2	0	123	26	22
Total IRB approach	332,102	34,261	28,596	11,980	20,263	9,687	21,229	33,677	29,175	4,250
Central governments or central banks	3,948	1,044	356	755	56	132	29	308	35	9
Regional governments or local authorities	195	26	43	38	0	13	0	44	0	277
Public sector entities	154	115	0	4	0	58	17	100	1	6
Multilateral Development Banks	0	0	0	0	70	0	0	0	0	0
Institutions	5,493	15,176	9,647	914	298	1,087	230	914	11	74
Corporates	21,417	1,708	2,106	1,773	521	586	1,037	4,423	1,199	3,461
Retail	13,481	900	7,104	1,382	8	278	207	1,119	1,096	2,666
Secured by mortgages on immovable property	2,294	181	3	13	4	11	24	460	836	1,842
Exposures in default	913	6	165	126	5	34	3	68	68	328
Collective investments undertakings (CIU)	33	186	0	11	466	92	53	88	0	18
Equity exposures	1,243	238	7	24	0	0	9	103	26	6
Other exposures	10,095	1,597	1,508	1,488	829	724	142	2,094	514	313
Total SA approach	59,266	21,178	20,941	6,527	2,256	3,015	1,751	9,718	3,787	8,998
Total	391,368	55,440	49,537	18,507	22,518	12,702	22,981	43,395	32,963	13,249

(continued)					31.12.2	016				
					Expositior	nette				
(In EUR m)	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	2,490	1,512	1,712	37,541	265	2,043	7,326	4,994	3,259	177,732
Institutions	175	452	1,978	7,054	1,102	484	2,607	1,276	7,549	59,765
Corporates	4,001	3,790	4,307	60,708	3,750	6,117	11,324	1,384	20,937	340,294
Retail	142	118	60	82	6	71	757	11	148	144,438
Equity	29	15	23	165	0	6	19	3	23	4,807
Total IRB approach	6,837	5,888	8,080	105,550	5,124	8,720	22,033	7,667	31,917	727,036
Central governments or central banks	828	45	535	611	18	66	839	272	100	9,988
Regional governments or local authorities	181	50	8	1	84	20	68	0	0	1,047
Public sector entities	41	24	0	0	0	0	0	0	0	520
Multilateral Development Banks	0	30	0	0	0	0	0	0	0	100
Institutions	85	712	101	30,276	1,045	642	375	2,996	5,324	75,399
Corporates	5,561	6,389	1,636	3,679	49	454	13,162	71	2,044	71,275
Retail	3,791	2,854	845	5	2	17	3,552	0	115	39,424
Secured by mortgages on immovable property	2,709	2,592	675	11	6	2	2,117	0	50	13,828
Exposures in default	299	327	124	22	0	14	652	0	27	3,180
Collective investments undertakings (CIU)	12	0	0	116	56	0	1	0	0	1,132
Equity exposures	28	2	25	12	0	0	184	1	39	1,946
Other exposures	296	580	86	321	15	245	1,024	44	262	22,177
Total SA approach	13,833	13,604	4,033	35,053	1,274	1,460	21,975	3,384	7,961	240,016
Total	20,669	19,492	12,113	140,603	6,399	10,180	44,008	11,052	39,878	967,052

The EBA's recommendation to institutions for this form (EBA Guidelines 2016/11) is to report exposures only for material exposure classes, as described in EBA 2014/14 guidelines. Société Générale opted to present both material and non-material exposure classes. Unused exposure classes are not presented.

In accordance with EBA's guidelines for revised pillar 3 (EBA/GL/2016/11) amounts are presented without securitisation, contributions to the default fund of a CCP, and other non-credit obligation assets under the internal approach.

					31.12.20	15				
					Exposition	nette				
(in EUR m)	France	United Kingdom	Germany	Italy	Luxembourg	Spain	Switzerland	Other Western European countries	Czech Republic	Romania
Central governments or central banks	54,881	1,281	5,244	632	7,717	758	12,168	5,932	7,756	3,705
Institutions	19,380	4,502	1,796	894	471	1,661	696	5,289	1,445	16
Corporates	114,933	22,771	16,001	7,411	6,974	7,681	6,345	25,453	10,356	551
Retail	122,384	1,693	3,042	3,318	110	49	644	384	8,682	2
Equity	4,253	71	5	2	332	31	0	145	24	20
Total IRB approach	315,831	30,317	26,089	12,257	15,603	10,180	19,852	37,204	28,263	4,295
Central governments or central banks	4,117	1,903	393	572	99	99	55	149	28	12
Regional governments or local authorities	773	18	0	24	0	16	0	15	0	262
Public sector entities	147	127	0	7	0	60	9	114	2	11
Multilateral Development Banks	0	0	0	0	0	0	0	2	0	0
Institutions	2,028	14,845	6,346	522	42	1,281	76	735	3	66
Corporates	22,350	5,315	2,500	2,930	5,634	877	177	3,321	838	3,025
Retail	11,285	1,076	6,189	1,106	10	321	173	947	1,181	2,440
Secured by mortgages on immovable property	2,331	86	8	13	6	11	31	25	795	1,806
Exposures in default	1,244	38	196	122	47	22	8	31	60	455
Collective investments undertakings (CIU)	65	198	6	20	30	5	0	6	0	17
Equity exposures	1,304	255	7	25	0	0	8	120	0	5
Other exposures	10,386	1,398	1,492	1,119	448	598	53	1,724	503	281
Total SA approach	56,030	25,258	17,139	6,460	6,316	3,290	591	7,189	3,411	8,380
Total	371,861	55,576	43,228	18,717	21,919	13,470	20,443	44,392	31,674	12,675

(continued)					31.12.20	015				
					Net expo	sure				
(In EUR m)	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	2,343	2,117	1,851	33,194	710	2,211	5,164	9,072	2,287	159,021
Institutions	371	605	2,275	4,508	788	551	2,220	968	7,441	55,878
Corporates	4,060	3,728	4,283	51,025	3,657	7,384	10,122	3,621	19,930	326,285
Retail	131	168	64	56	6	83	735	9	147	141,708
Equity	26	15	31	78	0	28	33	2	25	5,120
Total IRB approach	6,930	6,633	8,504	88,861	5,162	10,257	18,273	13,672	29,830	688,013
Central governments or										
central banks	747	169	448	884	8	23	815	2	87	10,609
Regional governments or										
local authorities	168	40	8	18	0	10	8	0	0	1,360
Public sector entities	27	24	0	0	0	17	3	0	0	548
Multilateral Development										
Banks	0	23	0	0	0	0	0	0	0	26
Institutions	77	418	46	10,058	614	328	479	2,490	4,069	44,522
Corporates	4,919	5,344	1,927	3,637	77	369	12,709	5	1,150	77,104
Retail	3,421	2,544	939	5	1	20	3,390	2	153	35,205
Secured by mortgages										
on immovable property	2,631	2,263	721	14	4	2	1,744	0	64	12,553
Exposures in default	355	189	603	85	0	57	739	0	52	4,306
Collective investments										
undertakings (CIU)	2	0	0	488	0	2	29	5	5	877
Equity exposures	25	2	18	32	0	0	148	2	23	1,974
Other exposures	163	347	112	165	9	57	1,049	29	261	20,195
Total SA approach	12,534	11,362	4,820	15,387	714	885	21,113	2,535	5,864	209,278
Total	19,464	17,995	13,324	104,248	5,876	11,142	39,386	16,207	35,694	897,291

## TABLE 40: UNDER THE IRB APPROACH FOR NON-RETAIL CUSTOMERS: CREDIT RISK EAD BY RESIDUAL MATURITY AND EXPOSURE CLASS

81% of the total credit risk exposure (except retail banking clients) has a maturity of less than five years, while 38% has a maturity of less than one year as of December 31st, 2016 (against 40% in 2015).

		31.12.2016								
		Breakdo	own by residual maturi	ity						
(In EUR m)	< 1 year	1 to 5 years	5 to 10 years	> 10 years	Total					
Sovereign	106,960	40,302	25,132	5,406	177,800					
Institutions	22,398	21,641	5,442	10,315	59,796					
Corporates	87,428	196,701	32,558	28,204	344,892					
Others	12,435	5,510	76	5,555	23,577					
Total	229,222	264,154	63,209	49,481	606,065					

			31.12.2015		
		Breakdo	wn by residual matur	ity	
(In EUR m)	< 1 year	1 to 5 years	5 to 10 years	> 10 years	Total
Sovereign	97,101	23,332	31,992	6,661	159,086
Institutions	22,440	16,014	5,651	11,801	55,906
Corporates	94,783	171,999	33,653	29,827	330,262
Others	12,592	2,517	144	7,175	22,428
Total	226,917	213,861	71,440	55,464	567,681

### Breakdown of global credit risk - impaired exposures and impairments

### TABLE 41: NON-PERFORMING AND FORBORNE EXPOSURES (CR1-E)

			31.12.2016			31.12.2015		
(In EUR m)		Debt securities	Loans and advances	Off-balance sheet exposures	Debt securities	Loans and advances	Off-balance sheet exposures	
Gross carrying amour performing exposures	nt of performing and non-	66,248	491,977	403,933	64,037	477,414	389,545	
of which performing <=90 days	g but past due >30 days and	0	1,412	0	0	2,098	0	
of which performing	g forborne	0	921	111	0	883	109	
of which non-perfo	rming	144	23,707	2,249	105	24,495	2,729	
of which: defa	of which: defaulted		23,707	2,249	105	24,495	2,729	
of which: impa	aired	144	23,707	2,249	105	24,495	2,729	
of which: forb	orne	0	5,584	235	0	5,829	208	
Accumulated	On,performing exposures	0	-1,534	-140	0	-1,388	-146	
impairment and	of which: forborne	0	0	0	0	0	0	
provisions and negative fair value adjustments due to credit risk	On,non-performing exposures	-90	-13,573	-308	-100	-14,232	-222	
	of which: forborne	0	<i>-2,3</i> 86	-30	0	-2,599	-16	
Collaterals and	On,non-performing exposures	0	7,081	514	0	6,373	533	
financial guarantees received	of which:,forborne exposures	0	2,137	85	0	1,872	107	

### TABLE 42: CHANGES IN STOCK OF GENERAL AND SPECIFIC CREDIT RISK ADJUSTMENTS (CR2-A)

	31.12	.2016	31.12	.2015
(In EUR m)	Accumulated Specific provisions credit risk adjustment	Accumulated General credit risk adjustment	Accumulated Specific credit risk adjustment	Accumulated General credit risk adjustment
Opening balance	(14,332)	(1,388)	(15,058)	(1,256)
Increases due to amounts set aside for estimated loan losses during the period	(4,964)	(572)	(5,913)	(508)
Decreases due to amounts reversed for estimated loan losses during the period	3,571	439	3,926	373
Decreases due to amounts taken against accumulated credit risk adjustments	2,216	0	3,263	0
Transfers between credit risk adjustments	0	0	10	10
Other adjustments	(154)	(13)	(560)	(7)
Closing balance	(13,663)	(1,534)	(14,332)	(1,388)
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	164		163	
Specific credit risk adjustments recorded directly to the statement of profit or loss	(255)		(245)	

# TABLE 43: IMPAIRED ON-BALANCE SHEET EXPOSURES AND IMPAIRMENTS BY EXPOSURE CLASS AND COST OF RISK

(In EUR m)		31.12.2016									
Impaired exposure	Standard approach	IRB approach	Total	Specific impairment	Impairment for groups of homogeneous assets	Cost of risk 2016					
Sovereign	16	557	573	65							
Institutions	31	42	72	39							
Corporates	3,971	6,841	10,812	6,593							
Retail	3,189	7,265	10,454	5,483							
Others	934	1,005	1,939	1,484							
Total	8,142	15,709	23,851	13,663	1,534	2,091					

(In EUR m)	31.12.2015									
Impaired exposure	Standard approach	IRB approach	Total	Specific impairment	Impairment for groups of homogeneous assets	Cost of risk 2015				
Sovereign	86	528	614	64						
Institutions	40	69	110	47						
Corporates	4,616	6,190	10806	7,516						
Retail	3,807	7,240	11047	5,372						
Others	798	1,226	2024	1,333						
Total	9,347	15,253	24,600	14,332	1,388	3,065				

# TABLE 44: IMPAIRED ON-BALANCE SHEET EXPOSURES AND INDIVIDUAL IMPAIRMENTS BY APPROACH AND BY GEOGRAPHIC REGION AND MAINS COUNTRIES

			31.12.	2016		
	Imp	paired exposures		Spe	ecific impairment	
	Standard	IRB		Standard		
(In EUR m)	approach	approach	Total	approach	IRB approach	Total
France	1,635	9,777	11,412	723	5,515	6,238
Germany	240	128	368	75	26	100
Switzerland	6	42	49	4	5	9
Spain	45	655	700	11	211	222
Italy	302	745	1,047	176	420	596
United Kingdom	28	977	1,005	22	794	816
Luxembourg	9	228	236	4	113	117
Other Western European countries	85	183	269	18	87	104
Romania	983	45	1,027	655	9	664
Czech Republic	205	578	782	137	395	532
Other Eastern European countries EU	921	15	936	621	28	649
Russia	1,046	141	1,186	719	21	740
Other Eastern European countries excluding EU	370	520	890	246	486	732
Africa and Middle East	2,110	514	2,624	1,458	248	1,706
The United States	78	681	759	56	173	229
Other countries of North America	0	0	1	0	0	0
Latin America and Carribbean	34	109	143	20	43	63
Asia-Pacific	46	373	418	19	128	146
Total	8,142	15,709	23,851	4,962	8,701	13,663

-	Imp	paired exposures		Spe	ecific impairment	
-	Standard	IRB		Standard	·	
(In EUR m)	approach	approach	Total	approach	IRB approach	Total
France	2,101	10,857	12,957	856	5,710	6,567
Germany	281	154	435	85	56	141
Switzerland	13	22	35	4	4	8
Spain	39	751	790	17	241	258
Italy	320	928	1,248	197	485	682
United Kingdom	70	36	107	32	9	42
Luxembourg	75	17	91	27	15	42
Other Western European countries	37	319	355	5	133	138
Romania	1,282	51	1,334	827	44	871
Czech Republic	215	608	823	155	431	586
Other Eastern European countries EU	1,025	45	1,070	670	90	760
Russia	912	62	974	723	39	762
Other Eastern European countries excluding EU	603	348	950	0	293	293
Africa and Middle East	2,150	369	2,519	1,411	288	1,699
The United States	85	321	406	0	1,307	1,307
Other countries of North America	0	20	20	0	7	7
Latin America and Carribbean	57	115	172	0	69	69
Asia-Pacific	83	231	313	31	69	100
Total	9,347	15,253	24,600	5,042	9,290	14,332

#### 31.12.2015

### TABLE 45: IMPAIRED ON-BALANCE SHEET EXPOSURES BY INDUSTRY SECTOR

	31.12.2010	6	31.12.201	5
(In EUR m)	Impaired exposure	%	Impaired exposure	%
Finance & insurance	2.110	9%	2,871	12%
Real estate	943	4%	1.067	4%
Public administration	90	0%	82	0%
Food & agriculture	569	2%	530	2%
Consumer goods	581	2%	411	2%
Chemicals, rubber and plastics	114	0%	142	1%
Retail trade	609	3%	671	3%
Wholesale trade	1,278	5%	1,423	6%
Construction	912	4%	1,079	4%
Transport equip. Manuf.	54	0%	48	0%
Education and Associations	50	0%	51	0%
Hotels & Catering	347	1%	360	1%
Automobiles	77	0%	119	0%
Machinery and equipment	372	2%	346	1%
Forestry, paper	102	0%	176	1%
Metals, minerals	533	2%	436	2%
Media	108	0%	136	1%
Oil and Gas	421	2%	221	1%
Health, social services	48	0%	64	0%
Business services (including conglomerates)	1,017	4%	629	3%
Collective services	233	1%	375	2%
Personal and domestic services	18	0%	18	0%
Telecom	32	0%	21	0%
Transport & logistics	859	4%	519	2%
Retail	10,454	44%	11,047	45%
Others	1,920	8%	1,760	7%
Total	23,851	100%	24,600	100%

### 4.10. CREDIT RISK DETAIL

Amounts indicated in this section correspond only to credit risk (without counterparty risk).

#### Breakdown of credit risk - Overview

# TABLE 46: CREDIT RISK EXPOSURE, EXPOSURE AT DEFAULT (EAD) AND RISK-WEIGHTED ASSETS (RWA) BY APPROACH AND EXPOSURE CLASS

	31.12.2016									
(In EUR m)		IRB		5	Standard			Total		
Exposure class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA	
Sovereign	167,358	175,581	5,928	9,932	11,104	9,325	177,291	186,685	15,253	
Institutions	40,157	34,923	5,866	38,854	37,442	4,803	79,011	72,366	10,668	
Corporates	293,882	200,167	95,941	66,524	50,667	43,052	360,405	250,834	138,992	
Retail	148,009	146,965	29,484	39,176	29,830	20,890	187,185	176,796	50,374	
Others	23,562	22,611	18,868	49,683	43,385	29,195	73,245	65,996	48,063	
Total	672,968	580,248	156,087	204,169	172,428	107,264	877,137	752,676	263,351	

				3	1.12.2015					
(In EUR m)		IRB			Standard			Total		
Exposure class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA	
Sovereign	147,601	157,676	5,528	10,449	11,297	10,114	158,050	168,973	15,642	
Institutions	38,454	33,457	6,075	22,510	25,922	4,409	60,963	59,379	10,484	
Corporates	283,396	188,763	92,986	72,598	50,969	44,068	355,994	239,732	137,054	
Retail	145,185	143,899	28,966	35,203	27,242	19,061	180,388	171,141	48,027	
Others	22,391	21,144	20,034	48,251	41,398	30,047	70,642	62,542	50,082	
Total	637,026	544,938	153,590	189,011	156,828	107,699	826,037	701,766	261,289	

### Breakdown of credit risk - Detail

# TABLE 47: STANDARDISED APPROACH – CREDIT RISK EXPOSURE AND CREDIT RISK MITIGATION (CRM) EFFECTS (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 the technique used by an institution to reduce the credit risk related to its exposures.

Amounts indicated in this table are without securitization and default fund of a CCP.

	31.12.2016										
(In EUR m)	Exposures befor	e CCF and CRM	Exposures post	-CCF and CRM	RWA and R	WA density					
Exposure class	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density					
Central governments or central banks	9,903	30	11,091	13	9,325	84%					
Regional government or local authorities	964	83	937	37	340	35%					
Public sector entities	509	11	486	5	116	24%					
Multilateral development banks	80	16	86	8	14	15%					
International organisations	0	0	0	0	0						
Institutions	30,602	6,589	34,848	1,036	4,333	12%					
Corporates	52,093	14,427	45,387	5,280	43,052	85%					
Retail	33,957	5,218	28,224	1,606	20,890	70%					
Secured by mortgages on immovable property	13,614,,	214	13,406	92	5,359	40%					
Exposures in default	2,963	216	2,918	95	3,600	119%					
Higher-risk categories	0	0	0	0	0						
Covered bonds	0	0	0	0	0						
Institutions and corporates with a short term credit assessment	0	0	0	0	0						
Collective investment undertakings	70	0	70	0	70	100%					
Equity	1,946	0	1,946	0	3,053	157%					
Other items	22,177	0	22,177	0	15,954	72%					
Total	168,878	26,804	161,577	8,171	106,105	63%					

	31.12.2015											
(In EUR m) Exposure class	Exposures befor	e CCF and CRM	Exposures post	-CCF and CRM	RWA and R	WA density						
Exposure class	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density						
Central governments or central banks	10,426	23	11,269	28	10,114	90%						
Regional government or local authorities	1,259	95	1,304	45	863	64%						
Public sector entities	534	12	524	9	131	25%						
Multilateral development banks	23	0	23	0	23	100%						
International organisations	0	0	0	0	0							
Institutions	19,001	1,585	22,538	1,479	3,391	14%						
Corporates	50,846	21,747	45,052	5,917	44,068	86%						
Retail	30,489	4,714	25,751	1,491	19,061	70%						
Secured by mortgages on immovable property	12,268	285	12,073	116	4,934	40%						
Exposures in default	4,000	306	3,900	137	4,643	115%						
Higher-risk categories	0	0	0	0	0							
Covered bonds	0	0	0	0	0							
Institutions and corporates with a short term credit assessment	0	0	0	0	0							
Collective investment undertakings	210	483	210	410	587	95%						
Equity	1,964	10	1,964	5	2,972	151%						
Other items	20,195	0	20,152	0	15,914	79%						
Total	151,216	29,259	144,760	9,638	106,701	69%						

### TABLE 48: CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (CR6) - IRBA

The table below presents non-defaulted exposures to credit risk using the internal approach for RWA calculation.

					31	.12.2016						
	D Scae	Original on-balance sheet gross exposure	Off-balance sheet exposures before CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Average LGD	Average maturity	4	RWA density		Value adjustments and Provisions
(In EUR m)	0	Oric she	Off-ba sheet expos before	Ave	EAD post- post-	Ave	Ave	Ave mat	RWA	Ň	Ц	Valt adju and
Central governments and												
central banks	0.00 à <0.15	147,203	641	64%	168,451	0.01%	2.56%	1.85	2,176	1%	4	
	0.15 à <0.25											
	0.25 à <0.50	1,034	0	98%	1,589	0.26%	13.06%	2.02	223	14%	1	
	0.50 à <0.75	9,964	2,065	94%	2,040	0.50%	38.55%	2.95	1,458	71%	4	
	0.75 à <2.50	2,297	733	94%	2,166	1.46%	24.37%	1.29	1,129	52%	8	
	2.50 à <10.00	1,311	258	100%	884	3.75%	24.85%	1.68	574	65%	8	
	10.00 à <100.00 Sub-total	1,220	372 4,069	61% 65%	348	12.79% 0.08%	21.80% 3.49%	1.40 1.86	367	106% <b>3%</b>	11 36	-10
Institutions	Sub-total	163,030	4,009	0076	175,479	0.00%	3.4970	1.00	5,927	370	30	-10
Institutions	0.00 à <0.15	20,378	5,837	73%	29,188	0.04%	10.11%	2.91	1,818	6%	2	
	0.15 à <0.25	20,010	0,007	10/0	20,100	0.0470	10.1170	2.01	1,010	070	~	
	0.25 à <0.50	739	466	82%	1,459	0.26%	33.25%	2.63	581	40%	1	
	0.50 à <0.75	7,075	2,078	34%	1,681	0.50%	20.40%	2.18	881	52%	2	
	0.75 à <2.50	1,462	772	62%	1,639	1.41%	21.39%	1.48	1,063	65%	6	
	2.50 à <10.00	332	436	75%	693	4.98%	15.90%	2.73	1,018	147%	13	
	10.00 à <100.00	312	204	59%	219	14.23%	22.52%	0.88	457	208%	12	
	Sub-total	30,298	9,793	72%	34,880	0.32%	12.29%	2.78	5,817	17%	38	0
Corporate - SME												
	0.00 à <0.15	7,655	956	91%	8,415	0.04%	89.86%	2.52	2,365	28%	3	
	0.15 à <0.25	0	0	100%	0	0.19%	27.70%	5.00	0	26%	0	
	0.25 à <0.50	2,018	416	80%	2,246	0.32%	61.68%	1.91	1,221	54%	5	
	0.50 à <0.75	3,204	518	73%	2,655	0.51%	32.42%	2.89	1,129	43%	4	
	0.75 à <2.50	7,612	1,563	79%	8,465	1.57%	31.56%	2.65	5,417	64%	42	
	2.50 à <10.00	6,715	1,186	82%	7,406	4.71%	30.46%	2.43	6,622	89%	105	
	10.00 à <100.00	1,951	261	74%	2,125	17.08%	28.06%	2.29	2,386	112%	100	
	Sub-total	29,156	4,901	81%	31,312	2.78%	48.96%	2.51	19,141	61%	259	0
Corporate - Specialised	0.00 2 .0 15	0.004	1 000	100/	4 400	0.000/	01 100/	0.00	470	110/		
lending	0.00 à <0.15	2,284	1,696	18%	4,482	0.06%	21.12%	2.03	472	11%	1	
	0.15 à <0.25 0.25 à <0.50	3,844	2,363	14%	4,285	0.26%	13.50%	2.07	639	15%	1	
	0.50 à <0.75	5,398	2,384	20%	5,795	0.20%	16.19%	2.71	1,578	27%	5	
	0.75 à <2.50	9,563	4,533	15%	9,643	1.53%	19.00%	3.19	4,914	51%	28	
	2.50 à <10.00	5,340	3,388	16%	5,623	4.58%	17.47%	2.05	3,236	58%	42	
	10.00 à <100.00	763	291	39%	738	14.14%	22.07%	2.56	827	112%	23	
	Sub-total	27,191	14,654	17%	30,567	1.80%	17.80%	2.55	11,667	38%	101	0
Corporate - Other		,										
	0.00 à <0.15	20,015	64,083	28%	53,956	0.07%	32.23%	2.69	10,285	19%	12	
	0.15 à <0.25											
	0.25 à <0.50	7,489	17,752	22%	15,969	0.26%	32.25%	2.71	6,647	42%	13	
	0.50 à <0.75	16,975	17,922	29%	14,640	0.50%	29.05%	2.62	7,321	50%	21	
	0.75 à <2.50	17,747	14,501	36%	22,311	1.53%	26.86%	2.48	15,605	70%	92	
	2.50 à <10.00	13,415	8,750	39%	15,939	4.51%	26.62%	2.41	14,288	90%	187	
	10.00 à <100.00	2,735	1,087	54%	2,433	16.12%	29.31%	2.20	3,326	137%	104	
	Sub-total	78,376	124,094	29%	125,247	1.28%	30.13%	2.60	57,471	46%	430	-1,026
Retail - Secured by real	0.00.) 0.(5			1000/		0.000/				70/		
estate SME	0.00 à <0.15	469	14	100%	491	0.03%	93.28%		35	7%	0	
	0.15 à <0.25	0	0	,	0	0.17%	12.20%		0	4%	0	
	0.25 à <0.50	988	9	100%	997	0.34%	12.20%		58	6%	0	
	0.50 à <0.75 0.75 à <2.50	347	5 17	100%	454	0.69%	7.40%		26	6% 13%	0	
	2.50 à <10.00	1,379 833	17	100% 100%	1,295 848	3.86%	11.25%		167 185	22%	3	
	10.00 à <100.00	357	10	100%	367	15.78%	13.71%		216	59%	8	
	Sub-total	4,373	71	100%	4,452	<b>2.47%</b>	20.95%		687	15%	13	0
Retail - Secured by real	0	,010		10070	1,402	2.117.70	20.0070			.070		
estate non-SME	0.00 à <0.15	22,150	766	100%	23,155	0.05%	21.77%		1,602	7%	2	
	0.15 à <0.25	15,639	226	100%	15,865	0.19%	12.86%		829	5%	4	
	0.25 à <0.50	6,243	157	100%	6,347	0.34%	16.82%		660	10%	4	
	0.50 à <0.75	12,435	268	85%	12,627	0.58%	12.43%		1,443	11%	9	
	0.75 à <2.50	18,420	542	93%	18,845	1.44%	8.75%		2,758	15%	23	
	2.50 à <10.00	8,289	197	77%	8,431	4.91%	11.41%		3,229	38%	44	
	10.00 à <100.00	1 670	23	96%	1,704	17.98%	7.86%		788	46%	28	
	Sub-total	1,672 <b>84,848</b>	2,179	95%	86,973	1.26%	11.98%		11,308	13%	113	0

(continued)

(In EUR m)	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	Ш	Value adjustments and Provisions
Retail - Qualifying						/						
revolving	0.00 à <0.15	39	921	40%	517	0.09%	41.32%		12	2%	0	
	0.15 à <0.25	1	376	22%	151	0.23%	37.71%		7	5%	0	
	0.25 à <0.50	71	238	86%	339	0.43%	48.39%		35	10%	1	
	0.50 à <0.75	104	653	5%	364	0.61%	33.90%		34	9%	1	
	0.75 à <2.50	408	706	63%	1,024	1.49%	44.38%		244	24%	7	
	2.50 à <10.00	848	410	88%	1,763	4.94%	45.21%		1,004	57%	39	
	10.00 à <100.00	556	50	92%	705	22.82%	42.81%		793	113%	65	
	Sub-total	2,027	3,354	63%	4,863	5.50%	42.25%		2,129	44%	113	0
Retail - Other SME												
	0.00 à <0.15	5	0	100%	6	0.08%	23.26%		0	3%	0	
	0.15 à <0.25	1	4	100%	4	0.20%	30.71%		0	10%	0	
	0.25 à <0.50	837	119	100%	996	0.37%	33.94%		166	17%	1	
	0.50 à <0.75	1,016	7	100%	943	0.56%	30.75%		181	19%	2	
	0.75 à <2.50	6,467	303	93%	6,737	1.48%	21.53%		1,362	20%	22	
	2.50 à <10.00	4,418	348	95%	4,748	5.05%	25.15%		1,780	37%	63	
	10.00 à <100.00	1,615	217	99%	1,814	19.11%	32.37%		997	55%	116	
	Sub-total	14,359	999	96%	15,247	4.56%	25.32%		4,487	29%	204	0
Retail - Other non - SME												
	0.00 à <0.15	5,814	1,032	97%	6,763	0.05%	75.85%		598	9%	2	
	0.15 à <0.25	1,071	170	100%	1,241	0.16%	15.50%		73	6%	0	
	0.25 à <0.50	3,680	351	100%	4,035	0.37%	28.71%		735	18%	4	
	0.50 à <0.75	1,252	23	100%	1,275	0.64%	37.19%		413	32%	3	
	0.75 à <2.50	6,044	635	100%	6,679	1.25%	28.33%		2,260	34%	25	
	2.50 à <10.00	6,428	243	99%	6,640	4.44%	29.66%		3,195	48%	90	
	10.00 à <100.00	1,493	22	100%	1,514	26.50%	29.21%		1,046	69%	113	
	Sub-total	25,783	2,477	99%	28,147	2.86%	39.32%		8,319	30%	237	-107
Specialized lending slotting criteria	Sub-total	411	1,685		962				626	65%	5	0
Other non credit- obligation assets	Sub-total	37			20				20	99%	0	0
Securitisation positions	Sub-total	2,112	16,573		18,682				1,560	9%	0	0
Equity	Sub-total	4,783	24		4,800				17,288	360%	110	0
Total		466,784	184,873	40%	561,632	1.39%	21.60%	2.28	145,760	26%	1,658	-1,143

					31	.12.2015						
(In EUR m)	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	Ш	Value adjustments and Provisions
Central governments and												/ 0 0
central banks	0.00 à <0.15 0.15 à <0.25	132,837	839	70%	152,839	0.01%	3.33%	2.04	2,904	2%	6	
	0.25 à <0.50	139			506	0.26%	15.92%	6.34	68	13%	0	
	0.50 à <0.75	7,376	1,606	96%	2,151	0.50%	37.41%	2.80	1,201	56%	3	
	0.75 à <2.50	1,114	0	58%	1,136	1.39%	22.94%	2.46	619	54%	4	
	2.50 à <10.00	1,524	513	64%	756	4.54%	21.96%	1.96	439	58%	8	
	10.00 à <100.00 Sub-total	860 143,851	710 3,668	98% 70%	207 157,595	12.36% 0.07%	27.73% 4.10%	2.35 2.07	288 5,520	139% <b>4%</b>	7 29	-9
Institutions	Sub-total	140,001	0,000	1070	107,000	0.0770	4.1070	2.07	0,020	7/0	23	
	0.00 à <0.15	18,961	6,303	77%	26,707	0.04%	10.74%	3.18	1,766	7%	2	
	0.15 à <0.25											
	0.25 à <0.50	1,223	332	81%	1,818	0.26%	25.02%	2.11	669	37%	1	
	0.50 à <0.75 0.75 à <2.50	7,069	906 1,205	78% 69%	2,455	0.50%	32.49% 19.99%	1.49 1.32	1,401 1,502	57% 82%	4	
	2.50 à <10.00	261	1,203	56%	352	4.44%	23.91%	5.38	301	86%	4	
	10.00 à <100.00	329	172	63%	211	13.26%	14.31%	0.92	338	160%	9	
	Sub-total	29,286	9,112	76%	33,381	0.30%	13.79%	2.90	5,978	18%	29	0
Corporate - SME												
	0.00 à <0.15	7,739	1,051	93%	8,651	0.04%	89.79%	2.45	2,487	29%	3	
	0.15 à <0.25	1 600	323	750/	1 200	U 310/	60 65%	2.20	051	520/	4	
	0.25 à <0.50 0.50 à <0.75	1,632	<u>323</u> 552	75% 74%	1,809 2,595	0.31%	60.65% 32.93%	2.38 2.95	951 1,180	53% 45%	4	
	0.75 à <2.50	6,533	1,365	77%	7,410	1.58%	31.37%	3.03	4,519	61%	37	
	2.50 à <10.00	5,881	901	79%	6,433	4.77%	30.72%	2.80	5,842	91%	93	
	10.00 à <100.00	1,829	206	68%	1,958	17.19%	27.54%	2.49	2,196	112%	92	
	Sub-total	26,653	4,398	82%	28,856	2.71%	50.46%	2.72	17,176	60%	233	0
Corporate - Specialised	0.00 } .0.15	0.010	0.770	1.50/	4.000	0.070/	10.000/	0.00	40.4	110/		
ending	0.00 à <0.15 0.15 à <0.25	2,316	2,778	15%	4,092	0.07%	18.23%	2.23	434	11%	1	
	0.25 à <0.50	2,174	1,302	7%	2,707	0.26%	20.04%	3.27	550	20%	1	
	0.50 à <0.75	6,429	2,591	26%	6,478	0.50%	16.70%	2.43	1,927	30%	6	
	0.75 à <2.50	7,028	4,101	7%	7,722	1.61%	19.76%	3.98	4,038	52%	24	
	2.50 à <10.00	5,178	3,104	11%	5,692	4.26%	17.74%	2.03	3,382	59%	44	
	10.00 à <100.00	807	333	59%	860	13.97%	19.36%	2.20	873	102%	24	
O the su	Sub-total	23,932	14,209	15%	27,550	1.92%	18.41%	2.83	11,204	41%	99	0
Corporate - Other	0.00 à <0.15	24,058	65,321	27%	53,681	0.07%	32.77%	2.71	10,626	20%	13	
	0.15 à <0.25	,							-,			
	0.25 à <0.50	6,918	16,781	15%	14,479	0.26%	34.12%	2.99	6,409	44%	13	
	0.50 à <0.75	14,935	18,278	28%	15,026	0.50%	30.95%	2.56	7,867	52%	23	
	0.75 à <2.50	15,759	12,497	33%	20,069	1.49%	28.94%	2.76	14,826	74%	84	
	2.50 à <10.00	12,475	9,179	34%	14,892	4.27%	27.92%	2.57	14,156	95%	178	
	10.00 à <100.00 Sub-total	2,689 76,833	1,051 123,108	43% 27%	2,356 120,503	15.54% <b>1.21%</b>	29.28% 31.40%	2.27 2.71	3,462 57,346	147% <b>48%</b>	106 <b>417</b>	-946
Retail - Secured by real	Sub-Iolai	70,000	123,100	2170	120,000	1.2170	31.40%	2.71	57,340	4070	417	-940
estate SME	0.00 à <0.15	585	19	100%	2,356	0.03%	33.25%		157	7%	1	
	0.15 à <0.25											
	0.25 à <0.50	22			21	0.45%	99.49%		12	58%	0	
	0.50 à <0.75	0.101		400-1	= .	0.0771	10 777					
	0.75 à <2.50	2,429	24	100%	1,404	0.99%	13.70%		191	14%	2	
	2.50 à <10.00 10.00 à <100.00	1,140 549	22	100% 100%	692 376	2.69% 15.78%	<u>13.70%</u> 13.71%		179 221	26% 59%	3	
	Sub-total	4,724	76	100%	4,849	1.91%	23.58%		760	16%	13	0
Retail - Secured by real		.,			.,5.15							
estate non-SME	0.00 à <0.15	22,592	727	100%	61,406	0.04%	16.66%		4,371	7%	6	
	0.15 à <0.25	3,086	31	100%	3,117	0.24%	15.63%		236	8%	1	
	0.25 à <0.50	16,843	311	100%	6,143	0.33%	17.17%		654	11%	4	
	0.50 à <0.75	4,980	122	60%	2,443	0.62%	24.73%		567	23%	4	
	0.75 à <2.50	17,620	456	89%	5,867	1.21%	17.79%		1,610	27%	13	
	2.50 à <10.00	15,539	295	75%	5,227	4.52%	16.51%		2,723	52%	39	
	10.00 à <100.00	1,723	20	98%	741	21.11%	16.55%		913	123%	26	
Potoil Qualifying	Sub-total	82,383	1,962	96%	84,944	0.61%	16.39%		11,074	13%	93	0
Retail - Qualifying evolving	0.00 à <0.15	40	222	82%	274	0.08%	48.21%		7	2%	0	
CVCIVILIY	0.15 à <0.25	5	330	41%	80	0.08%	51.86%		5	6%	0	
	0.25 à <0.25	56	354	76%	356	0.19%	49.61%		37	10%	1	
	0.50 à <0.75	73	390	25%	210	0.42 %	34.88%		22	10%	0	
							41.79%		313	22%	9	
	0.75 à <2 50	448	1.897	40%	1.392	1.40%						
	0.75 à <2.50 2.50 à <10.00	448 984	1,897 334	45% 93%	1,392 1,871	1.48%					40	
	0.75 à <2.50 2.50 à <10.00 10.00 à <100.00	448 984 488	334 72	45% 93% 89%	1,392 1,871 646	4.99%	44.09% 41.62%		1,021 732	55% 113%		

(continued)

(In EUR m)	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	Н	Value adjustments and Provisions
Retail - Other SME												
	0.00 à <0.15	6	1	100%	14	0.06%	40.29%		1	5%	0	
	0.15 à <0.25	1	2	100%	3	0.20%	30.18%		0	10%	0	
	0.25 à <0.50	778	107	100%	875	0.34%	29.75%		122	14%	1	
	0.50 à <0.75	1,041	6	100%	1,005	0.56%	31.81%		200	20%	14	
	0.75 à <2.50	6,238	309	94%	6,527	1.41%	20.84%		1,268	19%	20	
	2.50 à <10.00	4,527	294	94%	4,796	5.11%	25.19%		1,891	39%	64	
	10.00 à <100.00	1,763	138	99%	1,898	19.25%	30.01%		1,148	60%	113	
	Sub-total	14,353	858	96%	15,117	4.71%	24.63%		4,631	31%	212	0
Retail - Other non - SME												
	0.00 à <0.15	6,135	1,165	96%	7,260	0.06%	66.60%		600	8%	2	
	0.15 à <0.25	352	14	100%	365	0.17%	30.08%		42	12%	0	
	0.25 à <0.50	3,070	278	100%	3,332	0.37%	27.57%		590	18%	3	
	0.50 à <0.75	1,735	76	100%	1,811	0.62%	31.03%		486	27%	4	
	0.75 à <2.50	6,612	598	100%	7,197	1.38%	26.71%		2,494	35%	27	
	2.50 à <10.00	5,816	252	100%	6,035	4.46%	28.66%		2,668	44%	79	
	10.00 à <100.00	1,450	25	100%	1,475	27.01%	29.00%		1,201	81%	108	
	Sub-total	25,170	2,407	98%	27,474	2.89%	37.84%		8,082	29%	224	-105
Specialized lending slotting criteria	Sub-total	307	1,119		681				423	62%	2	0
Other non credit- obligation assets	Sub-total	42			33				29	91%	0	0
Securitisation positions	Sub-total	2,801	14,425		17,211				1,543	10%	0	0
Equity	Sub-total	5,090	30		5,110				18,462	361%	116	0
Total		437,519	178,974	40%	528,132	1.28%	23.74%	2.46	144,363	27%	1,576	-1,060
												-

### TABLE 49: CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (CR6) - IRBF

					3	1.12.2016						
(In EUR m)	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	Ш	Value adjustments and Provisions
Central governments and	0.00.) 0.45			1000/	07	0.000/	45.000/	0.50	0	00/	0	
central banks	0.00 à <0.15	32	7	100%	37	0.00%	45.00%	2.50	0	0%	0	
	0.15 à <0.25											
	0.25 à <0.50											
	0.50 à <0.75				0	0.100/	10.070/	0.50	0	4470/	0	
	0.75 à <2.50	0			0	2.12%	42.67%	2.50	0	117%	0	
	2.50 à <10.00	0			0	3.26%	45.00%	2.50	0	139%	0	
	10.00 à <100.00			1000/		0.000/	15 000/	0.50		1.0/		
	Sub-total	33	7	100%	38	0.03%	45.00%	2.50	0	1%	0	0
Institutions	0.00.) 0.45					0.000/	10 700/	0.50		170/		
	0.00 à <0.15	4			4	0.03%	43.70%	2.50	1	17%	0	
	0.15 à <0.25					/	/					
	0.25 à <0.50	0			0	0.26%	45.00%	2.50	0	70%	0	
	0.50 à <0.75	0			0	0.50%	45.00%	2.50	0	91%	0	
	0.75 à <2.50	0			0	1.88%	45.00%	2.50	0	118%	0	
	2.50 à <10.00	1	0	100%	1	3.60%	44.05%	2.50	1	133%	0	
	10.00 à <100.00	0			0	27.25%		2.50	0	294%	0	
	Sub-total	5	0	100%	5	0.61%	42.93%	2.50	2	37%	0	0
Corporate - SME												
	0.00 à <0.15	165	14	100%	193	0.11%	42.86%	2.50	41	21%	0	
	0.15 à <0.25											
	0.25 à <0.50	126	7	100%	132	0.26%	42.47%	2.50	49	37%	0	
	0.50 à <0.75	335	23	100%	310	0.50%	42.67%	2.50	159	51%	1	
	0.75 à <2.50	760	47	100%	793	1.48%	42.64%	2.50	612	77%	5	
	2.50 à <10.00	514	21	100%	564	4.60%	42.95%	2.50	578	102%	10	
	10.00 à <100.00	114	3	100%	112	16.51%	42.67%	2.50	180	160%	8	
	Sub-total	2,014	115	100%	2,104	2.77%	42.74%	2.50	1,618	77%	24	0
Corporate - Other												
	0.00 à <0.15	481	24	100%	506	0.07%	43.26%	2.50	116	23%	0	
	0.15 à <0.25											
	0.25 à <0.50	186	26	100%	206	0.26%	43.30%	2.50	106	51%	0	
	0.50 à <0.75	266	19	100%	270	0.50%	43.32%	2.50	192	71%	1	
	0.75 à <2.50	769	26	100%	791	1.55%	42.96%	2.50	841	106%	5	
	2.50 à <10.00	482	9	100%	498	4.45%	43.36%	2.50	707	142%	9	
	10.00 à <100.00	119	2	100%	115	16.00%	43.41%	2.50	258	225%	8	
	Sub-total	2,302	106	100%	2,387	2.31%	43.20%	2.50	2,220	93%	23	0
Alternative treatment: Secured by real estate	Sub-total	331	3	100%	334				157	47%	0	0
Secured by real estate												

					31	.12.2015						
(In EUR m)	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	Ш	Value adjustments and Provisions
Central governments and		10		1000/	10	0.000/	40.000/	0.50		00/		
central banks	0.00 à <0.15	12	4	100%	16	0.00%	43.90%	2.50	0	0%	0	
	0.15 à <0.25											
	0.25 à <0.50											
	0.50 à <0.75	0			0	0.50%	43.69%	2.50	0	72%	0	
	0.75 à <2.50											
	2.50 à <10.00											
	10.00 à <100.00					/						
	Sub-total	12	4	100%	16	0.00%	43.90%	2.50	0	0%	0	0
Institutions												
	0.00 à <0.15	2	0	100%	27	0.03%	44.65%	2.50	4	15%	0	
	0.15 à <0.25											
	0.25 à <0.50	0			0	0.26%	45.00%	2.50	0	69%	0	
	0.50 à <0.75	0			0	0.50%	42.59%	2.50	0	91%	0	
	0.75 à <2.50	0			0	1.10%	40.00%	2.50	0	129%	0	
	2.50 à <10.00	0			0	4.85%	42.07%	2.50	0	162%	0	
	10.00 à <100.00											
	Sub-total	2	0	100%	28	0.04%	44.64%	2.50	4	16%	0	0
Corporate - SME												
	0.00 à <0.15	175	16	100%	187	0.10%	42.67%	2.50	39	21%	0	
	0.15 à <0.25		10	10070		0.1070	12101 /0	2.00		2170		
	0.25 à <0.50	143	6	100%	149	0.26%	42.44%	2.50	56	38%	0	
	0.50 à <0.75	234	18	100%	247	0.20%	42.59%	2.50	125	50%	6	
	0.75 à <2.50	697	43	100%	731	1.50%	42.63%	2.50		77%	5	
									560			
	2.50 à <10.00	410	15	100%	413	4.48%	42.76%	2.50	448	108%	8	
	10.00 à <100.00	114	4	100%	114	16.51%	42.84%	2.50	191	167%	8	
	Sub-total	1,772	102	100%	1,841	2.73%	42.66%	2.50	1,420	77%	26	0
Corporate - Other												
	0.00 à <0.15	487	67	100%	481	0.07%	43.12%	2.50	111	23%	0	
	0.15 à <0.25											
	0.25 à <0.50	139	11	100%	144	0.26%	42.97%	2.50	75	52%	0	
	0.50 à <0.75	301	301	100%	528	0.50%	43.35%	2.50	345	65%	3	
	0.75 à <2.50	739	19	100%	760	1.38%	43.17%	2.50	783	103%	5	
	2.50 à <10.00	345	6	100%	337	4.58%	42.83%	2.50	492	146%	7	
	10.00 à <100.00	118	2	100%	115	15.39%	43.49%	2.50	258	223%	8	
	Sub-total	2,128	407	100%	2,365	1.99%	43.16%	2.50	2,063	87%	22	0
Corporate - Specialised												
ending	0.00 à <0.15											
-	0.15 à <0.25											
	0.25 à <0.50											
	0.50 à <0.75											
	0.75 à <2.50											
	2.50 à <10.00	15										
	10.00 à <100.00	10										
	Sub-total	15										0
Alternative treatment:	Sub-total	406			406				191	47%	0	0
Secured by real estate Total		4,336	513	100%	4,655	2.29%	42.95%	2.50	3,678	79%	48	0
10(a)		4,000	515	100 /0	4,000	2.23 /0	+2.35 /0	2.00	5,078	13/0	-+0	

#### TABLE 50: STANDARD APPROACH - EAD BREAKDOWN BY RISK WEIGHT (CR5)

In accordance with EBA's guidelines for revised pillar 3 (EBA/GL/2016/11), amounts are presented without securitisation and contributions to the default fund of a CCP.

								;	31.12.20	16						
(In EUR m)								F	Risk Weig	ght						
Exposure class	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total
Central																
governments or	6,069	0	0	0	267	0	36	0	0	1,716	0	3,015	0	0	0	11,104
central banks																
Regional																
governments or	187	0	0	0	555	0	1	0	13	219	0	0	0	0	0	974
local authorities																
Public sector	0	0	0	0	468	0	0	0	0	22	0	0	0	0	0	490
entities																
Multilateral	76	0	0	0	0	0	8	0	0	10	0	0	0	0	0	94
Development Banks	70	0	0	0	0	0	0	0	0	10	0	0	0	0	0	94
International																
Organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Institutions	8,673	6.957	0	0	12,887	36	984	0	29	1,025	31	0	0	0	5,262	35,884
Corporates	0,010	5	0	0	1,003	42	583	0	582	42,523	569	0		0	5,361	50,667
Retail	0	0	0	0	0	23	0	0	29,216	255	12	0		0	324	29,830
Secured by	Ū					20			20,210	200					021	20,000
mortgages on		_	_		_			_			_	_	_	_	_	
immovable	0	0	0	0	3	11,731	307	0	1,304	152	0	0	0	0	2	13,498
property																
Exposures in	0	0	0	0	0	0	0	0	0	1 607	1,327	0	0	0	80	3,014
default	0	0	0	0	0	0	0	0	0	1,607	1,327	0	0	0	80	3,014
Items associated																
with particularly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
high risk																
Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claims on																
institutions and																
corporates with a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
short-term credit																
assessment																
Collective																
investments	0	0	0	0	1	0	0	0	0	67	2	0	0	0	0	70
undertakings (CIU)																
Equity exposures	329	0	0	0	0	0	0	0	0	633	8	963	0	0	13	1,946
Other exposures	329 0	0	0	0	118	0	89	0	0	14,333	0	963	0	0	7,637	22,177
Total	15,335	6,962	0	0	15,303			0	31,143	62,562	1,948	3,978	0	0	18,679	169,748
Total	10,000	0,902	0	0	10,000	11,001	2,009	0	51,145	02,002	1,940	3,970	0	0	10,079	109,740

(In EUR m)									31.12.20 Risk Wei							
Exposure class	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total
Central governments or central banks	6,418	0	0	0	10	0	24	0	0	1,342	0	3,503	0	0	0	11,297
Regional governments or local authorities	33	0	0	0	509	0	26	0	10	740	0	0	0	0	32	1,349
Public sector entities	0	0	0	0	502	0	0	0	0	31	0	0	0	0	0	533
Multilateral Development Banks	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	23
International Organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Institutions	5,570	2,477	0	0	11,213	37	562	0	12	792	0	0	0	4	3,350	24,017
Corporates	0	1	0	0	1,609	0	670	0	937	42,616	823	0	0	0	4,314	50,969
Retail	0	0	0	0	0	29	1	0	26,805	214	2	0	0	0	191	27,242
Secured by mortgages on immovable property	0	0	0	0	3	10,216	366	0	1,493	111	0	0	0	0	1	12,189
Exposures in default	0	0	0	0	0	0	0	0	0	2,344	1,483	0	0	0	210	4,037
Items associated with particularly high risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collective investments undertakings (CIU)	0	0	0	0	0	0	67	0	0	553	0	0	0	0	0	621
Equity exposures	13	0	0	0	0	0	0	0	0	719	114	807	0	0	316	1,969
Other exposures	0	0	0	0	87	0	83	0	0	14,413	0	0	0	0	5,569	20,152
Total	12,034	2,479	0	0	13,932	10,281	1,799	0	29,257	63,898	2,422	4,310	0	4	13,983	154,398

### TABLE 51: RWA FLOW STATEMENTS OF CREDIT RISK EXPOSURES UNDER IRB (CR8)

(In EUR m)	RWA amounts	Capital requirements
RWA as at the end of previous reporting period (31.12.2015)	153,590	12,287
Asset size	4,032	323
Asset quality	(711)	(57)
Model updates	98	8
Methodology and policy	0	0
Acquisitions and disposals	0	0
Foreign exchange movements	587	47
Other	(1,509)	(121)
RWA as at the end of reporting period (31.12.2016)	156,087	12,487

#### 4.11. COUNTERPARTY RISK DETAIL

Amounts indicated in this section correspond solely to counterparty risk (i.e. without credit risk).

#### Breakdown of counterparty risk - Overview

## TABLE 52: COUNTERPARTY RISK EXPOSURE, EXPOSURE AT DEFAULT (EAD) AND RISK-WEIGHTED ASSETS (RWA) BY APPROACH AND EXPOSURE CLASS

				3-	1.12.2016				
(In EUR m)		IRB	Total						
Exposure class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA
Sovereign	10,442	10,442	235	56	56	1	10,498	10,498	236
Institutions	19,639	19,639	4,411	38,213	38,213	941	57,852	57,852	5,352
Corporates	51,010	51,010	14,754	4,754	4,754	4,344	55,764	55,764	19,098
Retail	42	42	5	249	249	15	291	291	20
Others	15	15	0	1,062	1,062	1,062	1,077	1,077	1,062
Total	81,148	81,148	19,406	44,333	44,333	6,363	125,481	125,481	25,770

		31.12.2015										
(In EUR m)		IRB		S	tandard		Total					
Exposure class	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	EAD	RWA			
Sovereign	11,485	11,577	321	160	160	144	11,645	11,737	465			
Institutions	17,452	17,589	4,521	23,946	23,945	1,263	41,398	41,534	5,784			
Corporates	46,866	46,637	15,976	4,510	4,510	4,258	51,376	51,148	20,234			
Retail	55	55	15	2	2	2	58	58	18			
Others	37	37	33	185	185	185	222	222	218			
Total	75,896	75,896	20,866	28,804	28,803	5,852	104,699	104,699	26,718			

The tables give the amounts excluding the CVA (Credit Value Adjustment). CVA amounted to EUR 5.1 billion at 31st December 2016 (vs. EUR 5.5 billion at 31st December 2015).

#### Breakdown counterparty risk - Detail

#### TABLE 53: COUNTERPARTY RISK BY PORTFOLIO AND PD SCALE (CCR4)

The form below presents non-defaulted exposures to counterparty risk using the internal approach for RWA calculation. In accordance with the EBA's recommendations, the CVA charges and exposures cleared through a CCP are excluded.

Institutions	PD scale 0.00 à <0.15 0.15 à <0.25 0.25 à <0.50 0.50 à <0.75 0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 Sub-total 0.00 à <0.15 0.15 à <0.25 0.25 à <0.50	EAD Post CRM 10,188 71 5 168 10 0 10,442 16,828	Average PD 0.01% 0.26% 0.50% 1.30% 3.29% 14.33% 0.03%	Average LGD 3.60% 21.62% 45.00% 26.83% 26.23% 85.00%	Average maturity 1.71 1.00 0.04 1.71 1.03 1.00	RWA 115 13 2 99 7	RWA density 1% 18% 44% 59%
Central governments and central banks	0.00 à <0.15 0.15 à <0.25 0.25 à <0.50 0.50 à <0.75 0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 Sub-total 0.00 à <0.15 0.15 à <0.25	10,188 71 5 168 10 0 <b>10,442</b>	0.01% 0.26% 0.50% 1.30% 3.29% 14.33%	3.60% 21.62% 45.00% 26.83% 26.23%	1.71 1.00 0.04 1.71 1.03	115 13 2 99	1% 18% 44%
central banks	0.15 à <0.25 0.25 à <0.50 0.50 à <0.75 0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 Sub-total 0.00 à <0.15 0.15 à <0.25	71 5 168 10 0 <b>10,442</b>	0.26% 0.50% 1.30% 3.29% 14.33%	21.62% 45.00% 26.83% 26.23%	1.00 0.04 1.71 1.03	13 2 99	18% 44%
Institutions	0.15 à <0.25 0.25 à <0.50 0.50 à <0.75 0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 Sub-total 0.00 à <0.15 0.15 à <0.25	71 5 168 10 0 <b>10,442</b>	0.26% 0.50% 1.30% 3.29% 14.33%	21.62% 45.00% 26.83% 26.23%	1.00 0.04 1.71 1.03	13 2 99	18% 44%
Institutions	0.25 à <0.50 0.50 à <0.75 0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 Sub-total 0.00 à <0.15 0.15 à <0.25	5 168 10 0 <b>10,442</b>	0.50% 1.30% 3.29% 14.33%	45.00% 26.83% 26.23%	0.04 1.71 1.03	2 99	44%
Institutions	0.50 à <0.75 0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 <b>Sub-total</b> 0.00 à <0.15 0.15 à <0.25	5 168 10 0 <b>10,442</b>	0.50% 1.30% 3.29% 14.33%	45.00% 26.83% 26.23%	0.04 1.71 1.03	2 99	44%
Institutions	0.75 à <2.50 2.50 à <10.00 10.00 à <100.00 <b>Sub-total</b> 0.00 à <0.15 0.15 à <0.25	168 10 0 <b>10,442</b>	1.30% 3.29% 14.33%	26.83% 26.23%	1.71 1.03	99	
Institutions	2.50 à <10.00 10.00 à <100.00 <b>Sub-total</b> 0.00 à <0.15 0.15 à <0.25	10 0 <b>10,442</b>	3.29% 14.33%	26.23%	1.03		59%
Institutions	10.00 à <100.00 Sub-total 0.00 à <0.15 0.15 à <0.25	0 <b>10,442</b>	14.33%			7	
Institutions	Sub-total 0.00 à <0.15 0.15 à <0.25	10,442		85.00%	1.00	1	70%
	0.00 à <0.15 0.15 à <0.25		0.03%		1.00	0	404%
	0.15 à <0.25	16 800		4.14%	1.71	235	2%
	0.15 à <0.25	16 829					
		10,020	0.05%	20.44%	2.10	2,138	13%
	0.25 à <0.50						
		, 097	0.26%	21.91%	1.97	520	47%
	0.50 à <0.75	579	0.50%	43.34%	1.59	474	82%
	0.75 à <2.50	768	1.48%	14.03%	1.96	833	109%
	2.50 à <10.00	155	3.99%	30.97%	1.87	196	127%
Corporate - SME	10.00 à <100.00	45	17.80%	37.17%	2.98	101	224%
Corporate - SME	Sub-total	19, 473	0.20%	21.07%	2.07	4,262	22%
		,					
	0.00 à <0.15	107	0.05%	62.23%	4.61	43	41%
	0.15 à <0.25						
	0.25 à <0.50	18	0.26%	31.90%	2.56	6	32%
	0.50 à <0.75	39	0.50%	32.62%	1.93	16	40%
	0.75 à <2.50	98	1.61%	33.33%	2.38	67	69%
	2.50 à <10.00	81	4.64%	35.30%	2.34	78	97%
	10.00 à <100.00	19	19.29%	35.02%	2.52	30	158%
	Sub-total	362	2.56%	42.24%	2.99	240	66%
Corporate - Specialised	ous total		2100 / 0		2.00	2.0	
lending	0.00 à <0.15						
	0.15 à <0.25						
	0.25 à <0.50	101	0.26%	12.57%	1.01	11	11%
	0.50 à <0.75	512	0.50%	8.39%	1.03	54	11%
	0.75 à <2.50	253	1.65%	11.86%	1.55	72	29%
	2.50 à <10.00	370	3.61%	6.74%	1.10	69	19%
	10.00 à <100.00	5	11.42%	4.03%	1.00	1	18%
	Sub-total	1,240	1.68%	8.93%	1.15	207	17%
Corporate - Other	oub total	1,210	1100 / 0	0.00 /0		207	
	0.00 à <0.15	34,364	0.05%	33.50%	1.83	4,998	15%
	0.15 à <0.25	04,004	0.0070	00.0070	1.00	-,000	10/0
	0.25 à <0.50	4,184	0.26%	28.45%	2.35	1,258	30%
	0.50 à <0.75	3,718	0.20%	31.36%	2.33	1,238	49%
	0.75 à <2.50	4,268	1.52%	28.71%	2.50	2,869	67%
	2.50 à <10.00	2,293	4.43%	30.31%	2.04	2,009	93%
	10.00 à <100.00	2,293	15.43%	29.45%	2.69	478	156%
		49,134	0.53%	<u> </u>	1.99	13,559	28%

(continued)

		EAD Post			Average		RWA
(In EUR m)	PD scale	CRM	Average PD	Average LGD	maturity	RWA	density
Retail - Other non - SME							
	0.00 à <0.15	40	0.03%	100.00%	5.00	4	119
	0.15 à <0.25						
	0.25 à <0.50	1	0.45%	100.00%	5.00	0	72
	0.50 à <0.75						
	0.75 à <2.50						
	2.50 à <10.00						
	10.00 à <100.00	1	10.40%	24.00%	5.00	0	43
	Sub-total	42	0.28%	98.23%	5.00	5	13
Securitisation positions	Sub-total	15				0	1
Total		80,708	0.41%	25.68%	1.96	18,509	23



			31	.12.2015			
(In EUR m)		EAD Post			Average		RWA
. ,	PD scale	CRM	Average PD	Average LGD	maturity	RWA	density
Central governments and				0.050/			
central banks	0.00 à <0.15	11,531	0.02%	8.05%	1.59	262	2%
	0.15 à <0.25		0.000/	45.000/	1.00		070
	0.25 à <0.50	3	0.26%	45.00%	1.00	1	37%
	0.50 à <0.75	8	0.50%	45.00%	0.20	4	45%
	0.75 à <2.50	35	2.07%	45.00%	4.85	54	154%
	2.50 à <10.00	0	4.61%	0.00%	2.45	0	0%
	10.00 à <100.00	0	14.33%	85.00%	1.00	0	404%
	Sub-total	11,577	0.03%	8.19%	1.60	321	3%
Institutions	0.00 \ 0.45		0.050/	10.000/			
	0.00 à <0.15	14,230	0.05%	19.89%	2.19	1,820	13%
	0.15 à <0.25		0.000/	00 700/			
	0.25 à <0.50	1,292	0.26%	26.79%	1.97	538	429
	0.50 à <0.75	783	0.50%	34.87%	1.39	642	829
	0.75 à <2.50	963	1.44%	33.29%	2.08	1,071	111%
	2.50 à <10.00	182	4.55%	35.39%	1.95	266	146%
	10.00 à <100.00	62	16.09%	30.81%	2.32	147	2359
	Sub-total	17,513	0.26%	22.01%	2.13	4,484	26%
Corporate - SME							
	0.00 à <0.15	124	0.04%	71.17%	1.54	34	279
	0.15 à <0.25						
	0.25 à <0.50	20	0.31%	49.42%	1.81	14	70%
	0.50 à <0.75	50	0.50%	33.95%	1.28	20	40%
	0.75 à <2.50	80	1.55%	33.95%	1.89	53	66%
	2.50 à <10.00	87	4.40%	35.68%	1.88	86	989
	10.00 à <100.00	23	19.60%	35.92%	2.33	38	161%
	Sub-total	385	2.60%	47.28%	1.72	244	63%
Corporate - Specialised							
lending	0.00 à <0.15	2	0.08%	28.75%	0.55	0	26%
	0.15 à <0.25						
	0.25 à <0.50	84	0.26%	6.84%	0.99	5	6%
	0.50 à <0.75	480	0.50%	12.98%	0.99	81	179
	0.75 à <2.50	224	1.77%	27.72%	1.76	153	689
	2.50 à <10.00	328	3.55%	12.30%	0.98	113	349
	10.00 à <100.00	44	11.42%	6.53%	0.93	13	299
	Sub-total	1,162	2.00%	14.92%	1.13	365	31%
Corporate - Other							
	0.00 à <0.15	30,191	0.05%	32.72%	1.72	5,503	189
	0.15 à <0.25						
	0.25 à <0.50	4,080	0.26%	32.03%	2.03	1,363	339
	0.50 à <0.75	3,432	0.50%	29.00%	2.38	1,561	45%
	0.75 à <2.50	4,071	1.65%	31.59%	2.33	3,067	75%
	2.50 à <10.00	2,571	4.45%	32.07%	1.46	2,454	95%
	10.00 à <100.00	461	14.70%	33.70%	2.28	780	169%
	Sub-total	44,807	0.65%	32.24%	1.85	14,728	33%
Retail - Other non - SME		44,007	0.0070	02.2470	1.00	14,720	007
COULD OT OT OT	0.00 à <0.15	30	0.05%	100.00%	0.20	4	159
	0.15 à <0.25		0.0070	100.0070	0.20	4	107
	0.25 à <0.50	1	0.46%	100.00%	0.96	1	729
	0.50 à <0.75	I	0.4070	100.00 /6	0.30	1	127
	0.75 à <2.50						
	2.50 à <10.00	0.4	10 400/	04.000/	0.00	10	400
	10.00 à <100.00	24	10.40%	24.00%	0.00	10	439
	Sub-total	55	4.53%	67.17%	0.13	15	289
Securitisation positions	Sub-total	37	0 =00/			33	89%
Total		75,537	0.50%	26.01%	1.86	20,191	279

#### TABLE 54: COUNTERPARTY RISK STANDARD APPROACH EAD BREAKDOWN 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	.12.20	16						
(In EUR m)									sk Weig							
Exposure class	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total
Central governments or central banks	55	0	0	0	0	0	0	0	0	1	0	0	0	0	0	56
Regional governments or local authorities	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Public sector entities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multilateral Development Banks	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
International Organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Institutions	3,907	18,080	0	0	1,675	0	246	0	0	62	0	0	0	0	14,239	38,208
Corporates	0	138	0	0	269	0	94	0	0	4,232	1	0	0	0	20	4,754
Retail	0	0	0	0	0	0	0	0	1	1	0	0	0	0	247	249
Secured by mortgages on immovable property	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exposures in default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Items associated with particularly high risk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claims on institutions and corporates with a short-term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collective investments undertakings (CIU)	0	0	0	0	0	0	0	0	0	1,062	0	0	0		0	1,062
Equity exposures	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Other exposures	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Total	3,961	18,218	0	0	1,945	0	340	0	1	5,362	1	0	0	0	14,506	44,333

(In EUR m)									.12.20 sk Weig							
Exposure class	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total
Central																
governments or	16	0	0	0	0	0	0	0	0	144	0	0	0	0	0	160
central banks																
Regional																
governments or	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	6
local authorities																
Public sector	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
entities	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Multilateral																
Development	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Banks																
International	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Organisations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Institutions	840	19,701	0	0	3,043	0	155	0	0	173	0	0	0	0	23	23,935
Corporates	0	0	0	0	132	0	261	0	0	4,088	5	0	0	0	24	4,510
Retail	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Secured by																
mortgages on	0	0	~	0	0	0	0	0	0	0	0	0	0	0	0	0
immovable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
property																
Exposures in	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Items associated																
with particularly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
high risk																
Covered bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claims on																
institutions and																
corporates with a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
short-term credit																
assessment																
Collective																
investments	0	0	0	0	0	0	0	0	0	184	0	0	0	0	0	184
undertakings (CIU)																
Equity exposures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other exposures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	856	19,701	0	0	3,184	0	416	0	0	4,593	5	0	0	0	47	28,802

## TABLE 55: EAD BY GEOGRAPHIC REGION AND MAIN COUNTRIES

(In EUR m)	31.12.2016	31.12.2015
Counterparty Risk	EAD	EAD
France	19,995	18,592
United Kingdom	18,104	16,161
Germany	7,542	8,811
Luxembourg	8,947	5,247
Other Western European countries	13,268	12,716
Czech Republic	960	2,039
Other Eastern European countries	1,109	1,765
Eastern Europe excluding EU	1,472	1,763
Africa and Middle East	1,503	2,080
United States	36,856	21,032
Other countries of North America	2,584	2,232
Latin America and Caribbean	1,325	1,295
Japan	3,401	4,378
Asia-Pacific	8,415	6,588
Total	125,481	104,699

## TABLE 56: RWA AND CAPITAL REQUIREMENTS FLOW STATEMENTS OF COUNTERPARTY RISK EXPOSURES UNDER THE IRB (CCR7)

IMM is the internal model method applied to calculate exposure to the counterparty risk. The banking models used are subject to approval by the regulator.

Application of these internal models has an impact on the method used to calculate the EAD of market transactions and on the Basel Maturity calculation method.

(in EUR m)	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 the end of previous reporting period (31.12.2015)	15,220	5,646	20,866	1,218	452	1,669
Asset size	(222)	(876)	(1,098)	(18)	(70)	(88)
Credit quality of counterparties	(221)	125	(96)	(18)	10	(8)
Model updates	0	0	0	0	0	0
Methodology and policy	0	0	0	0	0	0
Acquisitions and disposals	0	0	0	0	0	0
Foreign exchange movements	153	127	280	12	10	22
Other	(528)	(17)	(545)	(42)	(1)	(44)
RWA as at the end of reporting period (31.12.2016)	14,402	5,004	19,406	1,152	400	1,553

The table above presents the data without the CVA (Credit Value Adjustment) which is EUR 2.8 billion in advanced method.

#### TABLE 57: CVA (CREDIT VALUE ADJUSTMENT) CAPITAL REQUIREMENT (CCR2)

	31.12.201	16
(in EUR m)	Exposures	RWA
Total portfolios under advanced method	27,823	2,846
(i) VaR (with multiplier of 3 times)		784
(ii) Stressed VaR ((with multiplier of 3 times)		2,063
Total portfolios under standard method	10,234	2,243
Based on initial risk method	0	0
Total CVA Capital requirements	38,057	5,089

#### TABLE 58: EXPOSURES TO CCP (CCR8)

	31.12.20	)16	31.12.2015		
(In EUR m)	EAD	RWA	EAD	RWA	
Exposures to QCCP's					
Exposures for trades at QCCPs (excluding initial margin and					
default fund contributions); of which	32,415	327	31,907	324	
<ul> <li>OTC derivatives</li> </ul>	1,442	29	1,109	20	
<ul> <li>Exchange-traded derivatives</li> </ul>	30,587	291	30,564	300	
<ul> <li>Securities financing transactions</li> </ul>	386	8	234	5	
Netting sets where cross-product netting has been approved	-	-	-	-	
Segregated initial margin	5,628	-	5,680	-	
Non-segregated initial margin	11,484	231	10,119	403	
Pre-funded default fund contributions	2,636	896	2,553	710	
Alternative calculation of own funds requirements for exposures	-	40	-	157	
Exposured to non-QCCPs	-	-	-	-	
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	20	20	23	5	
OTC derivatives	20	20	23	5	
Exchange-traded derivatives	-	-	-	-	
<ul> <li>Securities financing transactions</li> </ul>	-	-	-	-	
<ul> <li>Netting sets where cross-product netting has been</li> </ul>					
approved	-	-	-	-	
Segregated initial margin	-	-	-	-	
Non-segregated initial margin	2	2	2	2	
Pre-funded default fund contributions	0	2	0	3	
Unfunded default fund contributions	-	-	-	-	

## TABLE 59: EXPOSURE ON DERIVATIVE FINANCIAL INSTRUMENTS (NOTIONAL) PRUDENTIAL SCOPE

	21.10.0010	31.12.2015		
(In EUR m)	31.12.2016	31.12.2015		
Interest rate instruments	10,923,556	12,463,703		
Fixed instruments	9,709,887	11,241,338		
Swaps	8,066,530	9,839,963		
FRAs	1,643,357	1,401,375		
Options	1,213,669	1,222,365		
Foreign exchange instruments	2,627,243	2,578,808		
Firm,instruments	2,415,727	2,436,325		
Options	211,516	142,483		
Equity and index instruments	840,145	846,150		
Firm,instruments	79,598	83,907		
Options	760,547	762,243		
Commodity instruments	174,621	209,665		
Firm,instruments	151,182	182,500		
Options	23,439	27,165		
Credit derivatives	482,609	672,182		
Other forward financial instruments	32,266	33,602		
Total	15,080,439	16,804,110		

The table above details the notional value of derivatives, shown in the table on p. 447 of the Registration Document (Note 2.3 of the Notes to the consolidated financial statements), within the prudential scope only.



# IN BRIEF

This section provides information on Societe Generale's securitisation positions, which have already been incorporated into the relevant sections (credit risks and market risks).

They are subject to specific capital requirements according to European regulations (CRR/CRD4).

Regulatory capital requirements for securitisations held or acquired in the banking book at end-2016

EUR 178 m (Amount at end-2015: EUR 220 m)

Regulatory capital requirements for securitisations held or acquired in the trading book at end-2016



## 5. SECURITISATION

#### 5.1. SECURITISATIONS AND REGULATORY FRAMEWORK

This chapter 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 said risks. Finally, it contains quantitative information to describe these activities during 2016, 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.

Securitisation positions are subject to the regulatory accounting treatment defined in Part 3, Title II, Chapter 5 of Regulation (EU) 575/2013 on prudential requirements for credit institutions and investment firms (CRR). Such positions held in the regulatory banking book or trading book are given weightings ranging from 7% to 1,250% depending on their credit quality and subordination rank.

This securitisation regulatory framework is due to evolve. Indeed, the Basel Committee published the final version of the new securitisation framework in July 2016. The new rules amend those adopted at the end of 2014 and propose specific and lower capital charges for "simple, transparent and comparable" (STC). The criteria for the identification of STC securitizations are included in the final text. Securitizations cannot be considered as STCs if the underlying assets have a certain level of risk. In addition, the "granularity" requirements of the reference portfolio are strengthened. This new framework also aims to reduce dependence on external ratings and threshold effects. The new prudential framework is expected to come into force in January 2018 for the Basel Committee.

European regulations to transpose the Basel proposals are still under discussion. The European Commission's proposals in September 2015, approved by the representatives of Member States at the end of 2015, were significantly revised by amendments of the European Parliament at the beginning of December 2016. Several important aspects (retention rates, eligibility of investors or originators for ABCP conduits, transparency requirements particularly for private transactions, maturity and granularity of ABCP assets, etc.) are still under discussion. The final European framework could be published by the end of the first half of 2017 for an implementation date that has yet to be determined.

#### 5.2. ACCOUNTING METHODS

The securitisation transactions that Société Générale 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 ("Significant accounting principles").

After initial recognition, securitisation positions booked to "Loans and receivables" are measured at amortised cost using the effective interest rate method. Impairment may be recorded if appropriate.

Securitisation positions booked to "Available-for-sale financial assets" are measured at their fair value at the closing date. Interest accrued or paid on debt securities booked to "Available-for-sale financial assets" is recognised in the income statement using the effective interest rate method under "Interest and similar income". Changes in fair value other than income are recorded in shareholders' equity under "Gains and losses recognised directly in equity".

The Group only records these changes in fair value in the income statement when the asset is sold or impaired, in which case they are reported as "Net gains or losses on available-for-sale financial assets". When a decline in the fair value of an available-for-sale financial asset has been recognised directly in shareholders' equity under "Gains and losses recognised directly in equity" and subsequent objective evidence of impairment emerges, the Group recognises the total accumulated unrealised loss previously booked to shareholders' equity in the income statement under "Cost of risk" for debt instruments, and under "Net gains and losses on available for-sale financial assets" for equity securities.

This cumulative loss is measured as the difference between acquisition cost (net of any repayments of principal and amortisation) and the current fair value, less any impairment of the financial asset that has already been booked through profit or loss. For assets transferred from another accounting category, amortised cost is determined based on estimated future cash flows determined at the date of reclassification. The estimated future cash flows are reviewed at each closing. In the event of an increase in estimated future cash flows, as a result of an increase in their recoverability, the effective interest rate is adjusted prospectively. However, where there is objective evidence of impairment due to an event occurring after the reclassification of the financial assets under consideration, and when said event has an adverse impact on initially estimated future cash flows, an impairment is booked to "Cost of risk" on the income statement.

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.

#### 5.3. STRUCTURED ENTITIES

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. In consolidating structured entities that are controlled by the Group, the shares of said entities 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.

#### 5.4. MONITORING OF SECURITISATION RISKS

Securitisation risks are monitored according to the rules established by the Group, depending on whether the assets are recorded in the regulatory banking book (via credit risk and counterparty risk) or in the trading book (via market risk and counterparty risk)

#### Structural risks and liquidity risk

Structural interest rate and foreign exchange risk associated with securitisation activities are monitored in the same way as for other Group assets. Oversight of structural interest rate risks is described in section 8 of this document (p.161). Liquidity risk linked to securitisation activities is subject to more specific monitoring, both at the level of the responsible business lines and centrally at the Finance Division level, by measuring the impact of these activities on the Group's liquidity ratios, stress tests and liquidity gaps. The organisation and oversight of liquidity risk is described in section 9 of this document (p.167).

#### **Operational risks**

Monitoring of securitisation operational risks is incorporated as part of operational risk management at Group level. Reports targeting zero tolerance for operational risk in the Group's originator and sponsor activities are established and checked on a monthly basis. Oversight of operational risk is described in section 7 of this document (p.151)

#### 5.5. 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 to 2014.

As part of securitisation activities, the Group, does not provide any implicit support in accordance with Article 128 of the CRR.

#### Société Générale 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 2016, two new securitisation transactions were carried out:

- EUR 1.0 billion securitisation of auto loans, publically placed for EUR 0.9 billion of funding
- EUR 0.7 billion securitisation of auto lease receivables and related residual values, publically placed for EUR 0.5 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 10.0 billion as at 31st

December 2016, including EUR 2.8 billion in French residential mortgages, EUR 1.6 billion in auto loans, EUR 3.6 billion in consumer loans and EUR 2.0 billion in auto lease receivables and related residual values.

The Group also has two synthetic securitisation programs in which the risk is transferred using credit derivatives and where the portfolio is retained in the Group's balance sheet.

The securitised stock of these transactions amounts to EUR 0.2 billion as of December 31st 2016, and mainly comprised loans to corporates.

#### Société Générale as sponsor

The Société Générale Group carries out transactions on behalf of its customers or investors. As of 31st December 2016, 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 12,683 million as of 31st December 2016 (EUR 11,031 million as of 31st December 2015).

As part of the implementation of the new IFRS 10 on 1st January 2014, Société Générale has consolidated the two vehicles, Barton and Antalis, from this date onwards.

The default risk on the assets held by these vehicles is borne by the transferors of the underlying receivables or by external investors. Société Générale bears part of the risk through liquidity lines in the amount of EUR 16,760 million as of 31st December 2016 (EUR 14,928 million as of 31 December 2015).

ABCP activity remained solid in 2016, with newly securitised outstandings predominantly comprising trade receivables, leasing or consumer loans.

#### Société Générale as investor

In 2016, Société Générale continued to reduce its legacy assets portfolio managed in runoff, through natural amortisation and asset disposals. The legacy portfolio amounted to only EUR 1.8 billion as of 31st December 2016, including EUR 0.6 billion from securitisation activity, with less than EUR 0.1 billion rated under investment grade. Therefore, the portfolio is no longer classified under major risk by the Group.

Société Générale also acts as a market maker for securitised assets, resulting in securitisation positions in the Group's trading book. As of 31st December 2011, CRD3 requires 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 asset, by region, by type of tranche, separately for the banking book and

trading book. These tables only present the exposures with an impact on Group's regulatory capital.

#### TABLE 60: AGGREGATE AMOUNTS OF SECURITISED EXPOSURES BY EXPOSURE CLASS

				31.12	.2016				
		Bankin	g Book			Tradin	ig Book		
(in M EUR)	Traditional tr	ransactions	Synthethic t	ransactions	Traditional t	ransactions	Synthethic to	thic transactions	
Underlying assets	Originator	Sponsor	Originator	Sponsor	Originator	Sponsor	Originator	Sponsor	
Residential mortgages	0	92	0	0	0	0	0	0	
Commercial mortgages	0	0	0	0	0	0	0	0	
Credit card receivables	0	1,877	0	0	0	0	0	0	
Leasing	0	1,026	0	0	0	0	0	0	
Loans to corporates and SMEs	0	655	171	0	0	0	0	0	
Consumer loans	0	7,210	0	0	0	0	0	0	
Trade receivables	0	4,557	0	0	0	0	0	0	
Other assets	0	1,207	0	0	0	0	0	0	
Covered bonds	0	0	0	0	0	0	0	0	
Other liabilites	0	0	0	0	0	0	0	0	
Total	0	16,624	171	0	0	0	0	0	

				31.12	2.2015			
		Bankin	g Book			Tradin	g Book	
(in M EUR)	Traditional t	ransactions	Synthethic t	ransactions	Traditional t	ransactions	Synthethic to	ransactions
Underlying assets	Originator	Sponsor	Originator	Sponsor	Originator	Sponsor	Originator	Sponsor
Residential mortgages	0	92	0	0	0	0	0	0
Commercial mortgages	0	0	0	0	0	0	0	0
Credit card receivables	0	1,724	0	0	0	0	0	0
Leasing	0	1,229	0	0	0	0	0	0
Loans to corporates and SMEs	0	181	299	0	0	0	0	0
Consumer loans	0	5,812	0	0	0	0	0	0
Trade receivables	0	4,335	0	0	0	0	0	0
Other assets	0	1,081	0	0	0	0	0	0
Covered bonds	0	0	0	0	0	0	0	0
Other liabilites	0	0	0	0	0	0	0	0
Total	0	14,454	299	0	0	0	0	0

#### TABLE 61: AMOUNTS PAST DUE OR IMPAIRED WITHIN THE EXPOSURES SECURITISED BY EXPOSURE TYPE

		31.12	.2016		31.12.2015			
(in M EUR)	Past due		Impaired		Past due		Impaired	
Underlying assets	Originator	Sponsor	Originator	Sponsor	Originator	Sponsor	Originator	Sponsor
Residential mortgages	0	0	0	0	0	0	0	0
Commercial mortgages	0	0	0	0	0	0	0	0
Credit card receivables	0	14	0	16	0	19	0	28
Leasing	0	1	0	1	0	5	0	1
Loans to corporates and SMEs	0	4	0	5	0	6	0	8
Consumer loans	0	77	0	48	0	76	0	25
Trade receivables	0	661	0	220	0	695	0	243
Other assets	0	1	0	0	0	1	0	1
Covered bonds	0	0	0	0	0	0	0	0
Other liabilites	0	0	0	0	0	0	0	0
Total	0	758	0	290	0	802	0	306

#### TABLE 62: ASSETS AWAITING SECURITISATION

(in M EUR)	31.12.2016	31.12.2015	31.12.2016	31.12.2015
Underlying assets	Banking	j book	Trading	) book
Residential mortgages	0	0	0	0
Commercial mortgages	0	0	0	0
Credit card receivables	0	0	0	0
Leasing	0	0	0	0
Loans to corporates and SMEs	0	0	0	0
Consumer loans	0	0	0	0
Trade receivables	0	0	0	0
Other assets	0	0	0	0
Covered bonds	0	0	0	0
Other liabilites	0	0	0	0
Total	0	0	0	0

## TABLE 63: AGGREGATE AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED IN THE BANKING BOOK

(in M EUR)		31.12.2016		31.12.2015		
Underlying assets	On-balance sheet	Off-balance sheet	Total	On-balance sheet	Off-balance sheet	Total
Residential mortgages	433	94	527	533	106	639
Commercial mortgages	76	0	76	163	28	191
Credit card receivables	0	1,877	1,877	0	1,724	1,724
Leasing	0	1,027	1,027	0	1,229	1,229
Loans to corporates and SMEs	212	655	867	430	181	611
Consumer loans	53	7,169	7,222	52	5,767	5,819
Trade receivables	0	4,557	4,557	12	4,323	4,335
Other assets	1,409	1,208	2,617	1,698	1,099	2,797
Covered bonds	0	0	0	0	0	0
Other liabilites	0	0	0	0	0	0
Total	2,183	16,587	18,770	2,888	14,457	17,345

At 31<sup>st</sup> December 2016, securitisation exposures in the banking book amounted to EUR 18,770 million, including EUR 2,183 million recorded on the balance sheet, the rest consisting predominantly of liquidity lines linked to the Group's sponsor conduit activity.

Exposures are concentrated in underlying assets comprised of securitisations, corporate loans, consumer loans and residential mortgages.

In 2016, banking book exposures increased by EUR 1,425 million, up 8% year-on-year.

The volume of assets of conduits managed by the Group increased significantly, mainly in consumer loans.

In 2016, the Group continued its legacy asset disposal programme. The portfolio of securitisations in runoff was reduced by a quarter over the year, mainly the following underlyings: residential mortgages (RMBS), commercial mortgages (CMBS), re-securitisations (CDOs) and loans to corporates (CLOs).

## TABLE 64: AGGREGATE AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED BY TYPE OF UNDERLYING IN THE TRADING BOOK

(in M EUR)	31.12.	2016	31.12.2015			
Underlying assets	Net long positions	Net short positions	Net long positions	Net short positions		
Residential mortgages	35	1	78	1		
Commercial mortgages	21	51	82	206		
Credit card receivables	14	0	8	0		
Leasing	8	0	0	0		
Loans to corporates and SMEs	136	3	133	0		
Consumer loans	11	0	18	0		
Trade receivables	0	0	0	0		
Other assets	153	4	67	12		
Covered bonds	0	0	0	0		
Other liabilites	0	0	0	0		
Total	378	59	386	219		

## TABLE 65: AGGREGATE AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED BY REGION IN THE BANKING BOOK AND THE TRADING BOOK

	3	31.12.2016			31.12.2015				
		Trad	Trading book		Trading book				
(in M EUR)	Banking book	Long positions	Short positions	Banking book	Long positions	Short positions			
America	10,143	282	58	9,094	265	218			
Asia	603	2	0	55	5	0			
Europe	7,930	39	1	7,896	56	1			
Others	94	56	0	299	60	0			
Total	18,770	378	59	17,345	386	219			

Growth of the Banking book is mainly concentrated in the Americas and Asia.

#### TABLE 66: QUALITY OF SECURITISATION POSITIONS RETAINED OR PURCHASED BANKING BOOK

	31.12.2016								
(in M EUR)		Nominal		Exposure	At Default (	EAD)			
Underlying assets	Highest- ranking tranche	Highest-ranking tranche	Mezzanine tranche	Initial loss tranche					
Residential mortgages	491	36	0	467	32	0			
Commercial mortgages	16	60	0	17	15	0			
Credit card receivables	1,842	35	0	1,841	35	0			
Leasing	924	103	0	924	103	0			
Loans to corporates and SMEs	728	122	17	728	121	17			
Consumer loans	7,129	93	0	7,128	84	0			
Trade receivables	4,557	0	0	4,555	0	0			
Other assets	2,600	17	0	1,744	4	0			
Covered bonds	0	0	0	0	0	0			
Other liabilites	0	0	0	0	0	0			
Total	18,287	466	17	17,404	394	17			

			31.12.20	15		
(in M EUR)		Exposure At Default (EAD)				
Underlying assets	Highest- ranking tranche	Mezzanine tranche	Initial loss tranche	Highest- ranking tranche	Mezzani ne tranche	Initial loss tranche
Residential mortgages	577	62	0	553	58	0
Commercial mortgages	116	76	0	105	29	0
Credit card receivables	1,715	9	0	1,715	9	0
Leasing	1,126	103	0	1,126	103	0
Loans to corporates and SMEs	535	47	29	535	45	29
Consumer loans	5,750	68	0	5,750	59	0
Trade receivables	4,301	34	0	4,287	34	0
Other assets	2,772	25	0	1,634	8	0
Covered bonds	0	0	0	0	0	0
Other liabilites	0	0	0	0	0	0
Total	16,892	424	29	15,705	345	29

In the banking book, senior tranches made up 97% of securitisation positions retained or purchased as of 31<sup>st</sup> December 2016. It mainly comes from trade receivables, consumer loans and re-securitisations underlying.

## TABLE 67: QUALITY OF SECURITISATION POSITIONS RETAINED OR PURCHASED TRADING BOOK

		31.12.2016							
(in M EUR)	Net	long positions	Net sl	Net short positions					
Underlying assets	Highest-ranking tranche	Mezzanine tranche	Initial loss tranche	Highest-ranking tranche	Mezzanin e tranche	Initial loss tranche			
Residential mortgages	12	24	0	1	0	0			
Commercial mortgages	13	9	0	4	47	0			
Credit card receivables	0	14	0	0	0	0			
Leasing	8	0	0	0	0	0			
Loans to corporates and SMEs	34	102	0	0	3	0			
Consumer loans	0	11	0	0	0	0			
Trade receivables	0	0	0	0	0	0			
Other assets	66	87	0	0	4	0			
Covered bonds	0	0	0	0	0	0			
Other liabilites	0	0	0	0	0	0			
Total	132	246	0	5	54	0			

			31.12	2.2015			
(in M EUR) Underlying assets	Net	long position	Net	Net short positions			
	Highest- ranking tranche	Mezzanine tranche	Initial loss tranche	Highest- ranking tranche	Mezzanine tranche	Initial loss tranche	
Residential mortgages	23	55	0	0	1	0	
Commercial mortgages	43	39	0	177	29	0	
Credit card receivables	0	8	0	0	0	0	
Leasing	0	0	0	0	0	0	
Loans to corporates and SMEs	40	93	0	0	0	0	
Consumer loans	6	12	0	0	0	0	
Trade receivables	0	0	0	0	0	0	
Other assets	32	35	0	12	0	0	
Covered bonds	0	0	0	0	0	0	
Other liabilites	0	0	0	0	0	0	
Total	144	242	0	189	30	0	

Positions in the securitisation trading book are exclusively high ranking and mezzanine tranches. This applies to long and short positions.

#### 5.6. PRUDENTIAL TREATMENT OF SECURITISATION POSITIONS

#### Approach for calculating riskweighted exposures

Whenever traditional or synthetic securitisations, in whose sponsorship, origination, structuring or management Société Générale 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 Société Générale 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. For the trading book, long and short positions are offset within the limits specified by the regulation. Risk-weighted assets resulting from securitisation positions are calculated by applying the appropriate risk ratios to the amount of the exposures.

Institutions authorised to use internal ratings for underlying assets must use the internal ratings based method (IRB). The bulk of the Group's positions in securitised receivables, both in the banking book and the trading book, are valued using this IRB approach, for which there are three calculation methods:

- the external ratings based approach (RBA) must be applied to all rated exposures or those for which a rating can be inferred. Under this approach, risk weightings are calculated to also reflect the seniority and granularity of the positions;
- the regulatory Supervisory Formula Approach (SFA) is a methodology for non-rated exposures, where the risk weight is based on five inputs associated with the nature and structure of the transaction. To use this approach, the capital charge must be calculated using the IRB approach for the portfolio of assets underlying the securitisation exposure;
- finally, the liquidity lines arising from the off-balance sheet exposures of Asset Backed Commercial Paper (ABCP) programmes are determined using the Internal Assessment Approach (IAA). For liquidity facilities issued by the Bank to

the securitisation vehicles it sponsors, Société Générale received approval in 2009 to use its internal ratings-based approach, in accordance with the CRR. Accordingly, Société Générale has developed an Internal Assessment Approach (IAA, whereby an internal rating is assigned to the Group's securitisation exposures, with each rating automatically resulting in a capital weighting based on an equivalence table defined by the regulation. Like the Group's other internal models, the IAA meets the regulatory standards for the validation of internal models, as defined by the regulation. An annual review of the model is performed to ensure that the configuration is sufficiently conservative. Finally, the model is used to measure impacts in stress scenarios and as a transaction structuring tool.

## External credit assessment institutions used by Société Générale

Assets securitised by Société Générale are usually rated by one or more ECAI (External Credit Rating Agency) rating agencies, the list of which is established by the French prudential supervisory authority ACP (Autorité de Contrôle Prudentiel). 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 31st October 2011. The capital requirements for securitisation positions valued using the standard method are calculated based on the lowest external rating of the securitisation exposure. An equivalence table (Table 11) between external ratings and Société Générale's internal rating scale is provided hereunder.

The following table presents Société Générale's internal rating scale and the corresponding scales of the main External Credit Assessment Institutions, as well as the corresponding mean estimated probability of default.

## TABLE 68: SOCIETE GENERALE'S INTERNAL RATING SCALE AND CORRESPONDING SCALES OF RATING AGENCIES

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

#### **Regulatory capital requirements**

Tables 68 and 69 show the bank's securitisation exposures and corresponding regulatory capital requirements for the banking book at 31<sup>st</sup> December 2016 and 31<sup>st</sup> December 2015. These exposures cover the same scope as that of tables 61, 65 and 66.

## TABLE 68: AGGREGATE AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED IN THE BANKING BOOK BY APPROACH AND BY RISK WEIGHT BAND

	E	xposure at D	efault (EAD)	(2)	Capital requirements			
(in M EUR)	Securitisation		Re-Secu	<b>Re-Securitisation</b>		tisation	<b>Re-Securitisation</b>	
Risk Weight band	31.12.2016	31.12.2015	31.12.2016	31.12.2015	31.12.2016	31.12.2015	31.12.2016	31.12.2015
6 à 10%	204	712	0	0	1	4	0	0
12 à 18%	674	378	0	0	6	4	0	0
20 à 35%	46	128	174	48	1	2	2	1
40 à 75%	28	67	42	44	1	3	1	2
100%	10	61	0	0	1	5	0	0
150 à 250%	0	0	0	17	0	0	0	3
>250 and <425%	0	12	0	0	0	3	0	0
>425% and <850%	0	0	0	0	0	0	0	0
RBA method	962	1,358	216	109	10	21	3	5
IAA method	16,389	14,200	0	0	110	97	0	0
Supervisory Formula Approach	171	298	0	0	2	3	0	0
1250%/Capital deductions	21	31	12	40	21	31	11	40
Total IRB approach	17,543	15,887	228	149	143	152	14	45
100% weighting	0	0	0	0	0	0	0	0
RBA approach	0	0	0	0	0	0	0	0
Transparency method	44	43	0	0	21	23	0	0
Total standardised approach	44	43	0	0	21	23	0	0
Total banking book	17,587	15,930	228	149	164	175	14	45

(2) EAD presented here are net of provisions. The 2015 positions have been adjusted accordingly.

At 31st December 2016, 99% of banking book securitisation exposures was valued under the IRB approach.

Under this method, 5% of exposures were weighted using the RBA method, 1% using the supervisory formula approach and 94% using the IAA method.

Under the standard approach, the securitisation positions are treated by a look-through approach.

Regulatory capital requirements in respect of banking book securitisation positions fell by EUR 41 million in 2016. This decrease predominantly reflected a decline in positions deducted from capital.

## TABLE 69: AGGREGATE AMOUNTS OF SECURITISED EXPOSURES RETAINED OR PURCHASED IN THE TRADING BOOK BY RISK WEIGHT BAND

(in M EUR)		31.12.2016			31.12.2015				
Tranche de pondération du risque	Net long positions	Net short positions	Capital requirements (1)	Long positions	Short positions	Capital requirements (1)			
6% - 10%	209	47	2	109	177	2			
12% - 18%	90	0	1	101	0	1			
20% - 35%	40	0	1	107	0	2			
40% - 75%	15	0	1	23	5	3			
100%	17	4	2	22	20	4			
>100% <= 250%	0	0	0	0	4	16			
>250% - <=425%	0	0	0	2	0	1			
>425% <=850%	0	0	0	0	0	0			
1250%/Capital deductions	0	0	0	2	9	9			
EAD subject to risk weight	371	51	6	366	215	37			
Supervisory formula method	0	0	0	0	0	0			
Transparency method	0	0	0	0	0	0			
IRB method	0	0	0	0	0	0			
Total, net of capital deductions	371	51	6	366	215	37			
1250%/Positions deducted from capital	7	8	15	20	4	24			
Total	378	59	21	386	219	62			

(1) As of January 2015, the Societe Generale Group no longer benefits from the exemption provided by the regulator to calculate its regulatory capital requirements based on the maximum amounts between long and short positions. It now calculates the capital requirements by summing both positions.

(in M EUR)	Banking	book	Trading book			
Underlying assets	31.12.2016	31.12.2015	31.12.2016	31.12.2015		
Residential mortgages	2	15	2	7		
Commercial mortgages	5	13	0	0		
Credit card receivables	0	0	0	0		
Leasing	1	0	0	0		
Loans to corporates and SMEs	0	1	3	0		
Consumer loans	12	3	0	0		
Trade receivables	0	0	0	0		
Other assets	12	39	10	17		
Covered bonds	0	0	0	0		
Other liabilites	0	0	0	0		
Total	32	71	15	24		

#### TABLE 70: SECURITISATION EXPOSURES DEDUCTED FROM CAPITAL BY EXPOSURE CATEGORY

## TABLE 71: REGULATORY CAPITAL REQUIREMENTS FOR SECURITISATIONS HELD OR ACQUIRED IN THE TRADING BOOK

	31.12.2016					31.12.2015			
(in M EUR)	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	370	51	72	6	364	211	263	21	
Re-securitisation	2	0	1	0	2	4	204	17	
Positions deducted from capital	6	8	0	15	20	4	0	24	
Total	378	59	73	21	386	219	467	62	

#### TABLE 72: RE-SECURITISATION POSITIONS RETAINED OR PURCHASED (EAD)

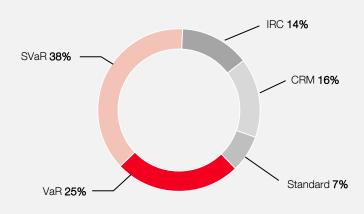
		31.1	12.2016		•		31.12.2015	
	Banking Book Trading Book			Banking Book Trading			ng Book	
	Before	After	Before		Before	After	Before	-
	hedging	hedging	hedging	After hedging	hedging	hedging	hedging	After hedging
(in M EUR)	/insurances	/insurances	/insurances	/insurances	/insurances	/insurances	/insurances	/insurances
Re-securitisation	228	228	2	2	149	149	6	6

## IN BRIEF

Market risk corresponds to the risk of a loss of value on financial instruments arising from changes in market parameters, the volatility of these parameters and correlations between them. These parameters include but are not limited to exchange rates, interest rates, and the price of securities (equity, bonds), commodities, derivatives and other assets.

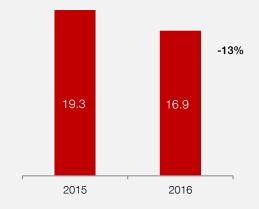
This section contains key information on the Group's market risk profile. It details both the internal indicators used to measure market risks and the corresponding regulatory information (RWA, VaR).

#### **DISTRIBUTION OF MARKET RISKS (RWA) BY RISK**



Market risk RWA at end-2016: EUR16.9 bn

#### MARKET RISKS (RWA IN EUR BN)



Market risk RWA EUR 16.9 bn (Amount at end-2015: EUR 19.3 bn)

Annual average Var (1 day, 99%) - 2016 EUR 21 m (Annual average VaR 2015: EUR 22 m)

Share of RWA calculated by the internal model



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## 6. MARKET RISKS

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

#### 6.1. ORGANISATION

Although primary responsibility for managing risk exposure lies with the front office managers, the supervision system is based on an independent structure: the Market Risk Department of the Risk Division.

The Department is responsible for:

- ensuring the existence and implementation of an effective market risks framework based on suitable limits;
- approving the limit requests submitted by the different businesses within the framework of the overall limits granted by the Board of Directors and the General Management, and based on the use of these limits;
- proposing appropriate market risk limits to the Group Risk Committee by Group activity;
- defining internal models used to compute capital requirements related to market risk;
- defining market risk measurement methods;
- approving the valuation models used to calculate risks and results;
- defining the methodologies used for the calculation of market risk provisions (reserves and adjustments to earnings).

To carry out these different duties, the Market Risk Department relies on information provided by the department responsible for the production, certification and first-level analysis of the risk metrics within the Group's Corporate and Investment Banking division (MACC – Market Analysts & Certification Community). MACC monitors the Group's market positions on a permanent, daily and independent basis, notably via the:

- daily calculation and certification of market risk indicators based on a formal and secure procedure;
- reporting and first-level analysis of these indicators;
- daily monitoring of the limits set for each activity, in conjunction with the Market Risk Department;
- verification of the market parameters used to calculate risks and results (the Market Risk Department being in charge of the source validation and the methods of determination of the parameters);
- monitoring and control of the gross nominal value of positions: this monitoring is based on alert levels applied to all instruments and desks, and contributes to the detection of possible rogue trading operations.

Accordingly, in conjunction with the Market Risk Department, MACC defines the architecture and functionalities of the information system used to produce the risk indicators for market transactions to ensure it meets the needs of the different business lines.

A daily report on the use of limits on VaR (Value at Risk), stress tests (extreme scenarios) and other major market risks metrics (sensitivity, nominal, etc.) at various levels (Societe Generale, Global Banking and Investors Solutions, or Global Market) is submitted to the General Management and the managers of the business lines, in addition to a monthly report which summarizes the key events in the area of market risk management.

#### 6.2. INDEPENDENT PRICING VERIFICATION

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

Firstly, each valuation model is independently validated by the Market Risk Department.

Secondly, the parameters used in the valuation models, whether derived from observable market data or not, are checked by the Finance Division and MACC (Independent Pricing Verification), the sources of the parameters having been approved by the Market Risk Department beforehand. If necessary, the valuations obtained are supplemented by reserves or adjustments (such as bid-ask spreads and liquidity), based on computation methodologies approved by the Market Risk Department.

Accounting valuation governance 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, at least every quarter, to discuss and approve financial instrument valuation methodologies (model refinements, reserve methodologies, parameter marking methods, etc.). This committee, chaired by the Finance Division and organised by its valuation expert team (Valuation Group) has worldwide accountability, and is the only body empowered to approve the valuation policies concerning financial instruments on market activities;
- On a quarterly basis, the Global Valuation Review Committee reviews changes in reserves, valuation adjustment figures, and related accounting impacts. This analytical review is performed by the Valuation Group.

Lastly, a corpus of Valuation Policies describes the valuation framework and its governance, specifying the breakdown of responsibilities between the stakeholders.

In addition, 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 CRD3 (Capital Requirements Directive). The RTS define the various uncertainties which have to be taken into account in the Prudent Valuation, and set a target level of confidence to reach (the bank must be 90% confident that the transaction could be liquidated at a better price than the prudent valuation).

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. 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. These amounts of AVA are deducted from the Common Equity Tier 1 Capital.

In terms of governance, the topics related to Prudent Valuation are dealt with during methodological committees and validation committees, organised quarterly, and both attended by representatives of the Global Markets Division, the Market Risk Department and the Finance Division.

#### 6.3. METHODS FOR MEASURING MARKET RISK AND DEFINING LIMITS

The Group's market risk assessment is based on three main indicators, which are monitored through limits:

- the 99% Value-at-Risk (VaR) method: in accordance with the regulatory internal model, this global indicator is used for the day-to-day monitoring of the market risks incurred by the Group within the scope of its trading activities;
- a stress test measurement, based on a decennial shock-type indicator. Stress test measurements make it possible to restrict and monitor the Group's exposure to systemic risk and exceptional market shocks;

#### 6.4. 99% VALUE AT RISK (VAR)

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 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 and 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.);
- definition of 260 scenarios corresponding to one-day variations in these market parameters over a rolling one-year period;
- 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.

Within the framework described above, the one-day 99% Valueat-Risk corresponds to the average of the second and third largest losses computed.

The day-to-day follow-up of the market risks is performed via the one-day VaR, which is computed on a daily basis. For regulatory capital requirements, however, we have to take into account a ten-day horizon, thus we also compute a ten-day VaR, which is obtained by multiplying the one-day VaR by the square root of ten. This methodology complies with Basel 2 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

complementary metrics such as sensitivity (showing local risks taken on trading activities), nominal (giving a more readily understandable order of magnitude on the exposures without netting effects), concentration or holding period, etc.

The following indicators are also calculated: stressed VaR on a daily basis, IRC (Incremental Risk Charge) and CRM (Comprehensive Risk Measure) on a weekly basis. The capital charges arising from these internal models complement the VaR by taking into account the rating migration risks and the default risks, and by limiting the procyclical nature of capital requirements.

take into account losses arising beyond this point; VaR is therefore an indicator of losses under normal market conditions and does not take into account exceptionally significant fluctuations;

 VaR is computed using closing prices, meaning that intra-day fluctuations are not taken into account.

The Market Risk Department mitigates the limitations of the VaR model by performing stress tests and other additional measurements.

At present, the market risks for almost all of Corporate and Investment Banking's activities (including those related to the most complex products) are monitored using the VaR method, as are 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 inhouse methods.

The relevance of the model is checked through ongoing backtesting in order to verify whether the number of days for which the negative result exceeds the VaR complies with the 99% confidence interval.

Daily profit and loss used for backtesting includes in particular the change in value of the portfolio (book value) and 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.

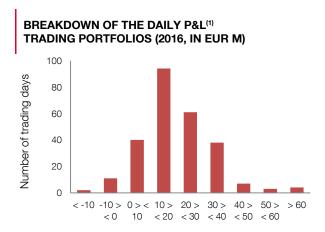
In 2016, daily losses were observed on 13 occasions, and one backtesting breach occurred on  $29^{th}$  December 2016, due to significant movements on the short-term cross-currency basic curves.

The following histograms show the distribution of this daily P&L over 2016, as well as the difference between daily P&L and VaR (negative values corresponding to backtesting breaches).

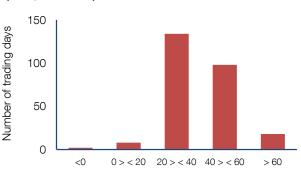
#### TABLE 73: REGULATORY TEN-DAY 99% VAR AND ONE-DAY 99% VAR

(In EUR m)	31.12	.2016	31.12.2015		
	VaR	VaR	VaR	VaR	
	(ten-day, 99%) <sup>(1)</sup>	(one-day, 99%) <sup>(1)</sup>	(ten-day, 99%) <sup>(1)</sup>	(one-day, 99%) <sup>(1)</sup>	
Period start	55	17	66	21	
Maximum value	99	31	99	31	
Average value	67	21	68	22	
Minimum value	43	13	43	14	
Period end	97	31	59	19	

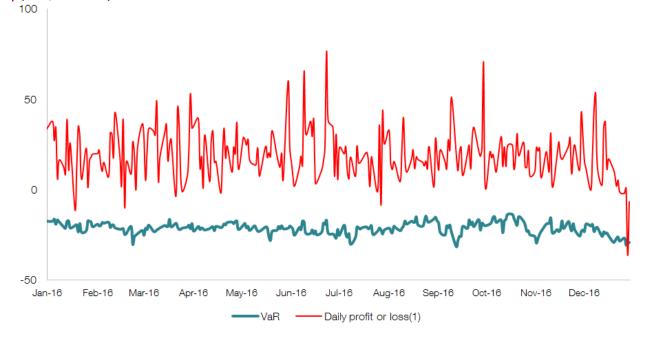
(1) Over the scope for which capital requirements are assessed by internal model.



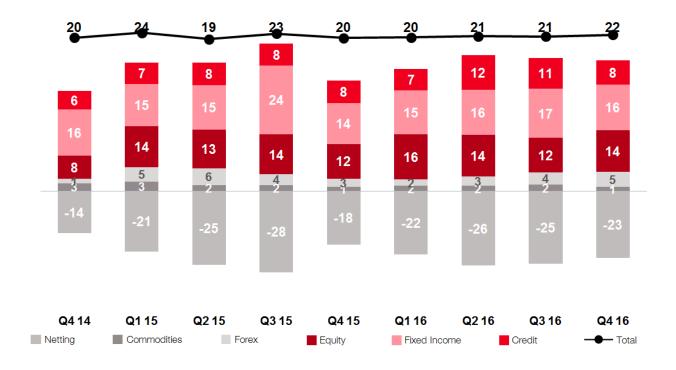
#### DIFFERENCE BETWEEN DAILY VAR AND DAILY P&L<sup>(1)</sup> (2016, IN EUR M)







(1) Daily profit or loss as defined in the "Value at Risk 99% (VaR)" section of the Group consolidated financial statements on the previous page.



BREAKDOWN BY RISK FACTOR OF TRADING VAR (ONE-DAY, 99%) – CHANGES IN QUARTERLY AVERAGE OVER THE 2015-2016 PERIOD (IN MILLIONS OF EUROS)

In 2016, VaR levels (one-day, 99%) remained low overall (EUR 21 million on average in 2016) due to a defensive risk profile on equity, in a market environment that remained uncertain, marked by a number of major unexpected political events (Brexit, US election) which brought about significant short-term market adjustments. VaR reached EUR 30 million on several occasions, such sporadic variations stemming from:

the inclusion of normalisation scenarios within the VaR computation window at the beginning of the year, reflecting

#### Stressed VaR (SVaR)

At end-2011, Societe Generale was authorised by the French Prudential and Resolution Supervisory Authority (*Autorité de Contrôle Prudentiel et de Résolution* – ACPR) to supplement its internal models with the CRD3 requirements, in particular Stressed VaR, for the same scope as VaR.

The calculation method used for the 99% one-day SVaR is the same as under the VaR approach. 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 99% ten-day SVaR used for the

downwards equity volatility, which penalised our defensive equity positions;

- over the year, new positions related to client flows and passive deformations due to market movements on certain risk factors, in particular equity;
- client flows on equity and the inclusion of new volatile scenarios within the computation window, in December.

computation of the regulatory capital is obtained, as for VaR, by multiplying the 99% one-day SVaR by the square root of ten.

The historical stress window, which is determined using a method approved by the regulator, captures significant shocks on all risk factors (risks related to equity, fixed income, foreign exchange, credit and commodities). It is subject to an annual review. In 2016, this window covered the period from September 2008 to September 2009.

The average SVaR decreased in 2016 compared to 2015, mainly due to more defensive positions on equity.

#### TABLE 74: REGULATORY SVAR IN 2016 (TEN-DAY, 99%) AND VAR (ONE-DAY, 99%)

(En M EUR)	31.12.2	016	31.12.2015		
	SVaR (ten-day, 99%) <sup>(1)</sup>	SVaR (one-day, 99%) <sup>(1)</sup>	SVaR (ten-day, 99%) <sup>(1)</sup>	SVaR (one-day, 99%) <sup>(1)</sup>	
Period start	155 49		243	77	
Maximum value	216	68	299	95	
Average value	142	45	172	55	
Minimum value	89	28	86	27	
Period end	164	52	129	41	

(1) Over the scope for which capital requirements are assessed by internal model.

#### 6.5. STRESS TEST ASSESSMENT

#### Methodology

Alongside the internal VaR model, Societe Generale monitors its exposure using stress test simulations to take into account exceptional market occurrences.

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.

This stress test risk assessment is applied throughout all the Bank's market activities. It is based on a set of 18 scenarios (3 historical and 15 hypothetical), which include the "Societe Generale Hypothetical Financial Crisis Scenario" (or "Generalised" scenario) based on the events observed in 2008. These scenarios apply shocks to all substantial risk factors, including exotic parameters.

Together with the VaR model, this stress test risk assessment methodology is one of the main pillars of the risk management framework. The underlying principles are as follows:

- the stress test corresponds to the worst result arising from the set of historical and hypothetical scenarios;
- the shocks applied are calibrated on time horizons specific to each risk factor (the time horizon can range from 5 days for the most liquid risk factors, to more than 20 days for the least liquid ones);

- risks are calculated every day for each of the Bank's market activities (all products together), using the historical and hypothetical scenarios;
- stress test limits are established for Societe Generale's activity as a whole, and then for the Group's various business lines.

The various stress test scenarios are reviewed by the Risk Division on a regular basis, in conjunction with the Group's teams of economists and specialists. These reviews are presented during dedicated committee meetings hold every six months, attended by the head of the Market Risk department, Societe Generale economists and representatives of the Trading activities of the Group. These committee meetings cover the following topics: changes in scenarios (creation, 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 modification contemplated. At the end of 2016, the time horizons used for shock calibration were reviewed: for some parameters (equity dividends, equity repos, implicit correlations on equity markets), the time horizons used previously were deemed inadequate in view of the evolution of market conditions, which led us to adjust the shocks used in the scenarios at the beginning of 2017.

## HISTORICAL STRESS TESTS

This method consists of an analysis of the major economic crises that have affected the financial markets since 1995 (date from which the financial markets have become global and subject to increased regulatory requirements): the 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 risk factors which, when applied to the bank's trading positions, could generate significant losses. accordingly, Societe Generale uses three significant historical scenarios related to the period from October to December 2008.

### HYPOTHETICAL STRESS TESTS

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 adopted the 15 hypothetical scenarios described below:

- Generalised scenario (Societe Generale's hypothetical financial crisis scenario): considerable mistrust of financial institutions after the Lehman Brothers' bankruptcy; collapse of equity markets, sharp decline in implied dividends, significant widening of credit spreads, pivoting of yield curves (rise in short-term interest rates and decline in long-term interest rates), substantial flight to quality;
- GIIPS crisis: mistrust in risky sovereign issuers and increased interest in higher-rated sovereign issuers such as Germany, followed by the spreading of fears to other markets (equities, etc.);
- Middle East crisis: instability in the Middle East leading to a significant shock in oil prices and other energy sources, a stock market crash, and a steepening of the yield curve;
- terrorist attack: major terrorist attack on the United States leading to a stock market crash, strong decline in interest rates, widening of credit spreads and sharp decline of the US dollar;
- bond crisis: crisis in the global bond markets inducing the decoupling of bond and equity yields, strong rise in US interest rates (and a more modest rise for other international rates), moderate decline on the equity markets, flight to quality with strong widening of credit spreads, rise in the US dollar;

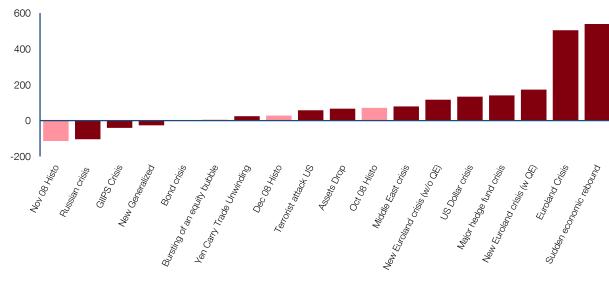
- US dollar crisis: collapse of the US dollar against major international currencies due to the deterioration of the US trade balance and budget deficit, rise in interest rates and narrowing of US credit spreads;
- Eurozone crisis: decline in euro exchange rates, sharp rise in Eurozone interest rates, sharp fall in euro equities and rise in US equities, significant widening of euro credit spreads;
- Yen carry trade unwinding: change in monetary policy in Japan leading to yen carry trade strategies being abandoned: significant widening of credit spreads, decline in yen interest rates, rise in US and Eurozone long-term interest rates and flight to quality;
- assets drop: unexpected halt in Central Bank quantitative easing policies leading to a widespread drop in risky assets (equity, credit, emerging) combined with a significant increase in worldwide interest rates;
- two other Eurozone crisis scenarios: exit of Greece from the Eurozone, triggering a widespread drop in risky assets (equity, credit, emerging), more particularly in Europe, and a tightening of the US and Japanese sovereign spreads, mitigated with ECB support (activation of the OMT programme resulting in a decrease of interest rates in the Eurozone) or without ECB support (dislocation of the basis rates reflecting the freeze of the interbank market);
- Russian crisis: significant depreciation of the Russian currency, default of the Russian government, crisis in the bond markets and drop in equities, more particularly in emerging markets (see Russian crisis in September 1998);
- major hedge fund crisis: risk of dislocation of the international financial system stemming from the near-bankruptcy of a major hedge fund, triggered by a crisis in the bond markets (as seen with the near-bankruptcy of Long Term Capital Management in October 1998);
- sudden economic rebound: sharp rise in equity markets and in US and Eurozone interest rates (as seen with the anticipation of the beginning of the Iraq war in March 2003);
- bursting of an equity bubble: significant drop in the equity markets following the bursting of an equity bubble in a specific business sector (as seen with the Worldcom bankruptcy in July 2002).

## Average stress tests in 2016<sup>(1)</sup>

2016 was affected by numerous economic and political uncertainties, which resulted in a volatile and unstable market environment:

- worldwide economic growth remained low, mainly due to the uncertainty surrounding Brexit and the new US political context, which triggered fears of a reduction in international trade in goods and services. These two major political events brought about significant short-term adjustments in the markets, which nonetheless quickly returned to normal conditions;
- after reaching very low levels in the summer of 2016 in a context of accommodating monetary policies, the long-term rates finally increased following the US elections;
- the European banking sector remained fragile, especially in Italy and Portugal.

In this context, the Group's global stress test was relatively stable over 2016, at a low level, down from 2015 (-49% vs. 2015), due to more defensive equity positions reflecting the reduced risk profile adopted. As a result, the worst scenarios observed in 2016 include scenarios which apply relatively moderate shocks on equity activities.



#### SIMULATION OF IMPACT OF STRESS SCENARIOS (2016 AVERAGES IN EUR M)

Theorical scenarios Historical scenarios

# Market risk capital requirements

At end-2011, Societe Generale received approval from the ACPR to expand its internal market risk modelling system and in particular to include Stressed VaR (VaR on one-year historical window corresponding to a period of significant financial tensions), IRC (Incremental Risk Charge) and CRM (Comprehensive Risk Measure), for the same scope as for VaR.

VaR and Stressed VaR were detailed in the previous section. IRC and CRM estimate the capital charge on debt instruments that is related to rating migration and issuer default risks. Societe Generale estimates these capital charges using a simulation model that distributes the various risk factors covered by regulatory requirements, while taking into account the relationships between these factors. IRC and CRM are 99.9% VaR factors, corresponding to the highest risk obtained after eliminating the 0.1% most adverse occurrences. Capital charges are incremental, meaning they are added to charges calculated based on VaR and SVaR.

A constant one-year liquidity horizon is used for all the portfolios on which IRC and CRM are calculated. This hypothesis means that the shocks applies to the positions in order to determine these two metrics (rating migrations, and spread of market parameters for CRM) are instantaneous one-year shocks. This hypothesis appears to be the most prudent choice in terms of models and capital, as compared to shorter liquidity horizons.

## Governance

IRC and CRM are subject to the same governance as other internal models that meet the regulatory Pillar 1 requirements. In particular:

- a weekly analysis is performed on these metrics;
- these metrics are compared with standard stress tests defined by the regulator;
- a review of model assumptions at least once a year and an ex-post consistency control are carried out;
- the methodology and its implementation have been approved by the Group Internal Audit Division and the ACPR.

In accordance with the regulations, IRC is applied to debt instruments already measured using internal models, other than securitisations and the correlation portfolio. In particular, this includes bonds, CDS and related derivative products.

CRM exclusively covers the correlation portfolio, i.e. CDO tranches for liquid issuers and "first-to-default" products as well as their hedging using CDS and indices. Aside from the credit-migration and default risk, CRM also covers any other pricing risks (for example, spread, recovery and correlation risks). Ultimately, the capital charge corresponds to the largest value between the charge calculated using the internal model and 8% of the charge calculated using the standard method for market risks.

## TABLE 75: IRC (99.9%) AND CRM (99.9%)

(In EUR m)	31.12.2016	31.12.2015
Incremental Risk Charge (99.9%)		
Period start	354	338
Maximum value	396	619
Average value	286	383
Minimum value	184	276
Period end	187	403
Comprehensive Risk capital charge (99.9%)		
Period start	163	172
Maximum value	263	295
Average value	194	150
Minimum value	142	115
Period end	214	147

# 6.6. MARKET RISK CAPITAL REQUIREMENTS AND RWA

#### TABLE 76: RWA AND CAPITAL REQUIREMENTS BY RISK FACTOR (MARKET RISK)

	Ca	pital requiremer	nt	Risk we	RWA)	
(In EUR m)	31.12.2016	31.12.2015	Change	31.12.2016	31.12.2015	Change
VaR	339	311	28	4,233	3,892	341
Stressed VaR	511	510	1	6,389	6,379	10
Incremental Risk Change (IRC)	187	403	(216)	2,343	5,038	(2,695)
Correlation portfolio (CRM)	214	163	51	2,669	2,031	638
Total market risks assessed by internal model	1,251	1,387	(136)	15,635	17, 340	(1,705)
Specific risk related to securitisation positions in the trading portfolio	6	37	(31)	73	467	(394)
Risk assessed for currency positions	48	41	7	600	513	87
Risks assessed for interest rates (excl.)	20	33	(13)	246	414	(168)
Risk assessed for ownership positions	18	41	(23)	225	510	(285)
Risk assessed for commodities	8	7	1	94	83	11
Total market risks assessed by standard approach	99	159	(60)	1,238	1,987	(749)
Total	1,350	1,546	(196)	16,873	19, 327	(2 454)

#### TABLE 77: RWA AND CAPITAL REQUIREMENTS BY TYPE OF MARKET RISK

	Capital requirement		Risk weighted assets (RWA)		
(In EUR m)	31.12.2016	31.12.2015	31.12.2016	31.12.2015	
Risk assessed for currency positions	96	75	1,206	941	
Risk assessed for credit (excl. deductions)	551	793	6,893	9,912	
Risk assessed for commodities	20	18	252	227	
Risk assessed for ownership positions	304	306	3,805	3,821	
Risks assessed for interest rates	377	354	4,717	4,426	
Total	1,350	1,546	16,873	19,327	

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Over 92% of Societe Generale's capital requirements related to market risk are determined using an internal model approach. The standard approach is mainly used for the positions taken by the head office and 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, and for subsidiaries for which the Group is awaiting approval from the regulator to use the internal models. The main entities concerned are Societe Generale Investment Limited (formerly Newedge UK), and some International Banking and Financial Services entities (Rosbank, SGMA, BRD, Splitska Banka, Mobiasbanca). The decrease in capital requirements related to market risk, observed both on internal model perimeter and on standard approach perimeter, is mainly due to (i) a reduction in IRC, stemming from a progressive repositioning on safer issuers from Q2 2016 onwards and a reduction in positions, and (ii) the amortisation of the positions on the securitisation portfolio.

# 6.7. MARKET RISK RWA AND CAPITAL REQUIREMENTS – ADDITIONAL INFORMATIONS

# TABLE 78: MARKET RISK UNDER STANDARDISED APPROACH (MR1)

ts Ci	Capital requirement
	31.12.2016
,165	93
246	20
225	18
600	48
94	8
73	6
0	0
0	0
0	0
73	6
,238	99
	,238

# TABLE 79: MARKET RISK UNDER INTERNAL MODELS APPROACH (MR2-A)

		Risk weighted assets (RWA)	Capital requirement
	(In EUR m)	31.12.2016	31.12.2016
1	VaR (higher of values a and b)	4,233	339
(a)	Previous day's VaR (Article 365(1) (VaRt-1))		193
(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)		339
2	SVaR (higher of values a and b)	6,389	511
(a)	Latest SVaR (Article 365(2) (sVaRt-1))		164
(b)	Average of the SVaR (Article 365(2) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366)		511
3	Incremental risk charge -IRC (higher of values a and b)	2,343	187
(a)	Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)		142
(b)	Average of the IRC number over the preceding 12 weeks		187
4	Comprehensive Risk Measure – CRM (higher of values a, b and c)	2,669	214
(a)	Most recent risk number for the correlation trading portfolio (article 377)		142
(b)	Average of the risk number for the correlation trading portfolio over the preceding 12-weeks		214
(c)	8 % of the own funds requirement in SA on most recent risk number for the correlation trading portfolio (Article 338(4))		162
5	Total	15,635	1,251

# TABLE 80: INTERNAL MODEL VALUES FOR TRADING PORTFOLIOS (MR3)

(In EUR m)	31.12.2016	31.12.2015	
VaR (10 jours, 99%) <sup>1</sup>			
Period start	55	66	
Maximum value	99	99	
Average value	67	68	
Minimum value	43	43	
Period end	97	59	
Stressed VaR (10 days, 99%) <sup>1</sup>			
Period start	155	243	
Maximum value	216	299	
Average value	142	172	
Minimum value	89	86	
Period end	164	129	
Incremental Risk Charge (99.9%)			
Period start	354	338	
Maximum value	396	619	
Average value	286	383	
Minimum value	184	276	
Period end	187	403	
Comprehensive Risk capital charge (99.9%)			
Period start	163	172	
Maximum value	263	295	
Average value	194	150	
Minimum value	142	115	
Period end	214	147	
Floor (standardised measurement method)	203	132	

(1) On the perimeter for which the capital requirements are assessed by internal model.

# TABLE 81: RWA FLOW STATEMENTS OF MARKET RISK EXPOSURES UNDER AN IMA (INTERNAL MODEL APPROACH) (MR2-B)

(In EUR m)	VaR	SVaR	IRC	CRM	Other	Total RWA	Capital requirement
RWA at previous reporting period (31.12.2015)	3,892	6,379	5,038	2,030	0	17,340	1,387
Regulatory adjustment	2,017	4,761	0	195	0	6,974	558
RWA at end of day previous year	1,875	1,618	5,038	1,835	0	10,366	829
Movement in risk levels	(34)	(89)	(2,694)	639	0	(2,179)	(174)
Model updates/changes	367	82	0	0	0	449	36
Methodology and policy	0	0	0	0	0	0	0
Acquisitions and disposals	0	0	0	0	0	0	0
Foreign exchange movements	8	16	0	0	0	25	2
Other	0	0	0	0	0	0	0
RWA at end of day quarter	2,412	2,049	1,770	2,531	0	8,762	701
Regulatory adjustment	1,822	4,340	574	138	0	6,873	550
RWA at the end of reporting period (31.12.2016)	4,233	6,389	2,343	2,669	0	15,635	1,251

Effects are defined as:

- Movement in risk levels: Changes due to position changes.
- Model 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: Changes arising from foreign currency translation movements.
- Other: This category must be used to capture changes that cannot be attributed to any other category.

# IN BRIEF

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

**Operational risks RWA** 

(Amount at end-2015: EUR 43.9 bn)

Share of RWA calculated by the internal model

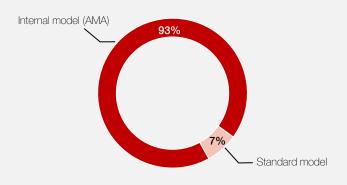
(2015 and 2016)

JR 44.4 bn

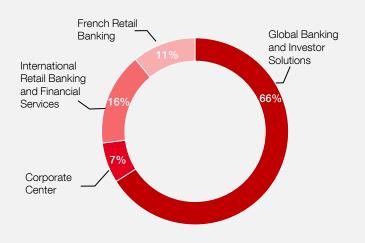
#### **OPERATIONAL RISKS (RWA IN EUR BN)**



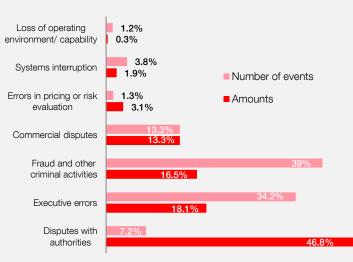
#### DISTRIBUTION OF OPERATIONAL RISKS (RWA) BY METHOD



#### DISTRIBUTION OF OPERATIONAL RISK RWA BY PILIAR



## DISTRIBUTION OF OPERATIONAL RISKS LOSSES BY AMOUNT AND BY NUMBER



# 7. OPERATIONAL RISKS

# 7.1. OPERATIONAL RISK MANAGEMENT: ORGANISATION AND GOVERNANCE

Societe Generale implements and continuously improves its processes, management tools and control infrastructure to enhance the Group-wide control and management of operational risks. These include, among others, the monitoring of losses and incidents, managerial supervision, business continuity plans<sup>(1)</sup>, the New Product Committees<sup>(2)</sup>, and specific complementary schemes dedicated to the management of compliance risks<sup>(3)</sup> and information system security risks<sup>(4)</sup>.

# The Operational Risk Department

The Operational Risk Department within the Group's Risk Division works in close cooperation with operational risk staff in the core businesses and Corporate Divisions.

The Operational Risk Department is notably responsible for:

- organising the Operational Risk function;
- designing and implementing the Group's operational risk management system, in consultation with the business divisions and Corporate Divisions;
- promoting high vigilance of operational risk within the Group.

The Operational Risk Department is also in charge of:

 preparing the overall Group business continuity and crisis management policy, managing the policy and coordinating its implementation;

- managing schemes for first-level permanent control of the Group and organising the managers coordinating first-level permanent control;
- performing second-level permanent control with respect to operational risks, the latter including in particular risks specific to the various business lines, and the risks related to purchasing, communication, property, human resources and information technology.

# The Operational Risk function

In addition to the Operational Risk Department, the Operational Risk function includes Operational Risk Managers (ORMs) in the core businesses and Corporate Divisions, who are under the operational authority of the Group's Chief Operational Risk Officer.

ORMs operate throughout the Group's entities and are responsible for implementing the Group's procedures, instructions and guidelines, and for monitoring and managing operational risks, with the support of dedicated operational risk staff in the business lines and entities, and in close collaboration with the respective entities' operational managers.

Operational Risk Committees have been set up at Group level, as well as in the core businesses, Corporate Divisions and subsidiaries.

<sup>(1)</sup> See Chapter 3, page 142 and Chapter 7 of Pillar 3, page 155.

<sup>(2)</sup> See Chapter 3, page 143.

<sup>(3)</sup> See Chapter 10 of Pillar 3 Report, page 179.

<sup>(4)</sup> See Chapter 3, page 142.

# 7.2. OPERATIONAL RISK MEASUREMENT

Since 2004, Societe Generale has used the Advanced Measurement Approach (AMA), as proposed 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 awareness, vigilance and management of operational risks.

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In 2007, the Autorité de contrôle prudentiel et de résolution (ACPR – French Prudential Supervisory and Resolution Authority) conducted an in-depth review of the system in place at Societe Generale. As a result, it authorised the Group to use the most advanced measurement approach, as defined by the Basel 2 Accord (i.e. the AMA or Advanced Measurement Approach) to calculate the Group's capital requirements for operational risks, starting from 1<sup>st</sup> January 2008. This authorisation covers more than 90% of the Societe Generale Group's total net banking income

# 7.3. OPERATIONAL RISK MONITORING PROCESS

The frameworks specifically established by regulations<sup>(1)</sup> have been implemented on the basis of existing procedures wherever possible.

They notably include:

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

	OPERATIONAL RIS	SK MONITORING	
Risk identification	n and assessment		
Key Risk	Indicators		
Controls and	action plans		Analysis of scenarios
Business continuity a	nd crisis management		
Incidents	/ Losses		
	Calculation of the capital allo	ocated to operational risk	
Governance	Risk identification and assessment	Supervision and control	Strategic management and reporting

- Order of 20th February 2007 relating to capital requirements for credit institutions and investment firms Article 370 on internal control and environmental factors,
- International Convergence of Capital Measurement and Capital Standards Basel Committee on Banking Supervision June 2004,
- Sound Practices for the Management and Supervision of Operational Risk Basel Committee on Banking Supervision February 2003,

<sup>(1)</sup> Regulatory reference texts:

<sup>-</sup> Order of 3<sup>rd</sup> November 2014 relating to the internal control of credit institutions and investment firms, replacing the CRBF (French Banking and Financial Regulation Committee) regulation No. 97-02.

Societe Generale's classification of operational risks in eight event categories and 49 mutually exclusive sub-categories is the cornerstone of its risk modelling, ensuring consistency throughout the system and enabling cross-business analyses throughout the Group. The eight event categories are as follows:

- commercial disputes;
- disputes with authorities;
- pricing or risk valuation errors;
- execution errors;
- fraud and other criminal activities;
- rogue trading;
- loss of operating resources;
- IT system interruptions.

## Internal loss data collection

Internal loss (but also gains and near loss) data has been compiled throughout the Group since 2003, enabling operational staff to:

- define and implement the appropriate corrective actions;
- achieve a deeper understanding of their risk areas;
- enhance the awareness of and vigilance with respect to operational risks in the Group.

The minimum threshold above which a loss (or gain or near loss) is recorded is EUR 10,000 throughout the Group, except for global market activities, where this threshold is EUR 20,000 due to the scope of its activity and the volumes involved.

Below these thresholds, the losses representing weak-signal risks are collected by the Group's various businesses and reported as an aggregation if they concern the same risk event and the total exceeds the reporting threshold.

## **Risk and Control Self-Assessment**

The purpose of Risk and Control Self-Assessment (RCSA) is to assess the Group's exposure to operational risks in order to improve their monitoring. Based on the results of other operational risk management frameworks (internal losses, key risk indicators, etc.), risk areas are identified by the functions based on their respective fields of expertise, and interviews are conducted with Group experts.

The objectives are as follows:

- identifying and assessing the major operational risks to which each business is exposed (the "intrinsic" risks, i.e. those inherent in the nature of a business, while disregarding prevention and control systems). Where necessary, risk mapping established by the functions (e.g. Compliance, Information Systems Security, etc.) contribute to this assessment of intrinsic risks;
- assessing the quality of major risk prevention and mitigation measures (including their existence and effectiveness in detecting and preventing major risks and/or their capacity to reduce their financial impact);
- assessing the risk exposure of each business that remains once the risk prevention and mitigation measures are taken into account (the "residual risk"), while disregarding insurance coverage;

- correcting any deficiencies in risk prevention and mitigation measures and implementing corrective action plans;
- facilitating and/or supporting the implementation of key risk indicators;
- adapting the risk insurance strategy, if necessary. As part of this exercise, the risks within a given scope are described using a double scale of severity and frequency.

#### 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 line risk profiles. Accordingly, regular KRI monitoring assists managers of the business entities in their assessment of the Group's operational risk exposure, thereby providing them with:

- a quantitative, verifiable risk measurement;
- a regular assessment of the improvements or deteriorations in the risk profile and the control and prevention environment which require particular attention or an action plan.

A cross analysis of Group-level KRIs and operational losses is presented to the Group's Executive Committee on a quarterly basis via a specific dashboard.

## Analysis of scenarios

The analysis of scenarios serves two purposes: informing the Group of potential significant areas of risk and contributing to the calculation of the capital required to cover operational risks.

For the calculation of capital requirements, the Group uses *scenario* analyses to:

- measure its exposure to potential losses arising from low frequency/very high severity events;
- provide an expert's opinion of loss distribution for event categories whose internal loss data history is insufficient.

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.). Analyses are undertaken for two types of scenarios:

- major Group stress scenarios, involving very severe events that cut across businesses and departments, having an external cause in most cases and requiring, if necessary, a business continuity plan (BCP);
- business line scenarios that do not, strictly speaking, fall into the category of business continuity, but are used to measure the unexpected losses to which the businesses may be exposed. Specific actions are performed in order to prevent the portfolio from being diluted over too many scenarios and to maintain the system's focus on risks that could severely impact the Group;

Governance is established in order to, notably:

- allow the approval of the annual scenario update programme by the Risk Committee (CORISQ);
- allow the approval of the scenarios by the senior management of the core businesses and Corporate Divisions, through internal control coordination committees (CCCI) for 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 the "Expert Committees" chaired by the Group Chief Risk Officer.

### Analysis of external losses

External losses are the data of operational losses suffered by the banking and financial sector, coming from databases managed by external providers, as well as data shared by the banking industry as part of consortia.

This data is used to enhance the identification and assessment of the Group's exposure to operational risks by benchmarking internal loss records against industry-wide data.

### Permanent second-level control

The permanent second-level control in the Operational Risk Department covers all Group business lines with a team dedicated to the review of IS/ISS controls.

These second-level controls cover the operational risks specific to the business lines and related to purchases, communication, real estate, human resources and information systems. They are intended to ensure that the first-level controls are defined, implemented and effective, and that corrective measures are implemented for any anomalies.

Verifications made by the second-level control teams concern all the Group's business activities. They are applied first and foremost to controls covering the major risks and to controls selected randomly.

# Crisis management and business continuity

The crisis management and business continuity systems aim to mitigate as much as possible the impacts of potential damages on customers, staff, activities and infrastructure, thus protecting the Group's reputation, its brands' image and its financial resiliency. The systems also meet regulatory requirements.

The approach used to implement and optimise the business continuity systems of each Group entity is based on a methodology that meets international standards. It consists primarily in identifying risks to which the company is exposed as well as their possible impacts, implementing an effective response capability to withstand various crisis scenarios (including extreme shocks), and maintaining these systems to ensure they remain effective.

## **Combating fraud**

The Group pays particular attention to preventing and detecting fraud. Losses due to fraud are contained after dropping remarkably from 2010 to 2014, notably due to the implementation of effective systems in all core businesses and Corporate Divisions. Acting as a second line of defence, the Operational Risk Department carefully monitors fraudulent events causing losses for the Group, monitors the action plans defined by entities, and shares best practices.

# 7.4. OPERATIONAL RISK MODELLING

The method used by the group for operational risk modelling is based on the loss distribution approach (Ida).

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

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

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

the Group's annual loss distribution.

Societe Generale's total capital requirements for operational risks were EUR 3.6 billion at the end of 2016, representing EUR 44.7 billion in risk-weighted assets. This assessment integrates capital requirements on both the AMA and Standard scopes.

# 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.

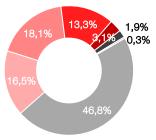
These insurance policies cover part of the Group's major risks, i.e. civil liability, fraud, fire and theft, as well as systems interruptions and operating losses due to a loss of operating resources.

Risk reduction through insurance policies results in a 6% decrease in total capital requirements for operational risks

# **Quantitative data**

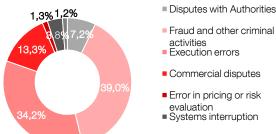
The following charts break down operating losses by risk category for the 2012-2016 period.

# OPERATIONAL RISK LOSSES: BREAKDOWN BY SOCIETE GENERALE RISK EVENT TYPE – AMOUNTS



- Disputes with Authorities
- Fraud and other criminal activities
- Execution errors
- Commercial disputes
- Error in procing or risk evaluation
- Systems interruption
- Loss of operating environment / capability

#### OPERATIONAL RISK LOSSES: BREAKDOWN BY SOCIETE GENERALE RISK EVENT TYPE – NUMBER OF EVENTS



Loss of operating environment / capability Over the past five years, Societe Generale's operational risks were concentrated on average on four types, accounting for 95% of the Group's total operating losses:

- Disputes with authorities represented 47% of the Group's operating losses over the period. Losses incurred through this type of litigation are relatively high unit amounts, so that this category represents only 7% of the total number of losses. 2016 was marked by the reduction, by the European Commission, of the fine on the Euribor litigation (a loss in 2013). This loss now accounts for 25% of the total amount of losses in this category over the period.
- Execution errors represented 18% of total operating losses, thereby representing the second leading cause of loss for the Group. Although losses of this type generally increased over the period, they remain volatile, linked to the volume of transactions processed.
- Fraud and other criminal activities, the third-largest category, represented 16% of operational losses over the period (in terms of amount). They are mainly due to electronic payment fraud and the production of false documents relating to guarantees for financing under collection.
- Commercial disputes represented 13% of total Group operating losses. The amount of losses in this category was stable compared with last year. However, given the disputes involving large amounts observed among our peers, we should be careful to remain vigilant, in particular regarding the selection of sold products, their compliance, the quality of their documentation and the quality of service expected by customers.

The other categories of Group operational risk (rogue trading, IT system interruptions, loss of operating resources, etc.) were still fairly insignificant, representing barely 5% of the Group's losses on average over the 2012 to 2016 period.

# 7.5. OPERATIONAL RISK INSURANCE

## Policies of the insurance subscription

#### **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 broadest and highest levels of guarantee with regard to the risks incurred and enabling all entities to benefit from these guarantees wherever possible. Coverage is 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 programme.

In addition, special insurance policies may be taken out by entities which 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 coverages**

#### **GENERAL RISKS**

Buildings and their content, 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, vehicles, etc.) is covered by insurance policies around the world. The amounts insured vary from country to country to meet operating requirements.

#### **RISKS ARISING FROM OPERATIONS**

Insurance is only one of the measures to offset the consequences of the risks inherent in the Group's activity. It complements the risk monitoring policy led by the Group.

#### 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 frauds (committed by an employee or by a third party acting with the aid of an employee) and external frauds (committed by a third party acting on its own), with the intent to obtain illicit personal gain or to harm the Group, are covered.

#### PROFESSIONAL LIABILITY

The consequences of any legal action against staff or managers as a result of their professional activity are insured under a global policy.

#### **OPERATING LOSSES**

The consequences of any accidental interruption to activity are insured under a global policy. This policy supplements the business continuity plans. The amounts insured are designed to cover losses incurred between the time of the event and the implementation of an emergency solution.

#### CYBER ATTACKS

In an environment – not specific to the banking sector – where new forms of crime are rapidly developing, mainly involving data theft or the compromise or destruction of computer systems, a cyber risk insurance policy has been taken out. It provides cover for the reimbursement of various expenses and business interruption losses which the Group would incur following a Cyber attack, as well as any financial consequences arising from its civil liability in such cases.

# 7.6. CAPITAL REQUIREMENTS

Societe Generale's capital requirements related to operational risk are calculated mainly under the internal model (93% in 2016, stable compared with 2015).

The following table presents the Group's risk-weighted assets and the corresponding capital requirements at 31<sup>st</sup> December 2016.

# TABLE 82: RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS FOR OPERATIONAL RISK (IN EUR M)

		31.12.2016				31.12.2015		
	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	401	28,889	29,290	2,343	314	27,950	28,263	2,261
Corporate Centre	418	2,946	3,364	269	354	2,988	3,342	267
International Retail Banking and Financial Services	2,205	4,773	6,978	558	2,431	5,070	7,501	600
French Retail Banking	47	4,706	4,753	380	38	4,709	4,747	380
Total	3 071	41,314	44,385	3,550	3,137	40,717	43,854	3,508

Operational risk-weighted assets were stable overall between end-2015 and end-2016.

# IN BRIEF

Structural interest and exchange rate risk 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 and exchange rate risk arises 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 to the Group's structural interest rate risk (in % of regulatory capital)

<1.5% at end-2015)

Group net interest margin sensitivity over one year, in the event of parallel shift in the yield curves of +200bp (in % of the net banking income)

# <1% (< 1% in 2015)

Maximum sensitivity of the Group Common Equity Tier 1 ratio to a 10% change by currency (in basis points)



# 8. STRUCTURAL INTEREST RATE AND EXCHANGE RATE RISKS

Structural exposure to interest rate and exchange rate risks results from commercial transactions and their associated hedging transactions, as well as from corporate centre transactions.

The interest rate and exchange rate risks linked to trading 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 extent possible within the consolidated entities. Wherever possible, commercial transactions and corporate centre operations within entities are hedged against interest rate and exchange rate risks, either through micro-hedging (individual hedging of each commercial transaction) or macro-hedging techniques (hedging of portfolios of similar commercial transactions within a treasury department). At a consolidated level, a structural foreign exchange position is retained in order to minimise the sensitivity of the Group Common Equity Tier 1 ratio to currency fluctuations.

# 8.1 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 Group Finance Committee:

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

# The ALM Department within the Finance Division

The ALM Department is responsible for:

- defining the structural risk policies for the Group and formalising risk appetite for structural risks;
- defining the steering indicators and overall stress test scenarios for the different types of structural risk and setting the main limits for the business divisions and the entities;
- analysing 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 structural risk metrics, modelling methods and framework;

- validating the models used by the Group entities with regard to structural risks, validated together with the Risk Division and the business lines;
- inventorying, 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, this department provides an opinion on the methodological principles, parameters and backtests of ALM models. It analyses proposals from the ALM Department regarding the risk indicators, stress test scenarios and structural risk frameworks. It also conducts second-level controls of the risk limits comprising such frameworks. The Risk Department organises and chairs the Model Validation Committee.

# The entities are responsible for structural risk management

In this respect, entities apply the standards defined at the Group level, develop their own models, measure their risk exposure and implement the required hedges.

Each entity has its own structural risk manager, who reports to the entity's Finance Division and is responsible for conducting first-level controls and for reporting to the Group Finance Division via a shared IT system. Retail Banking entities both in France and abroad generally have an ad hoc ALM Committee responsible for applying the validated models, managing exposures to interest rate and exchange rate risks, and implementing the hedging programmes in compliance with the principles set out by the Group and the limits validated by the Finance Committee and the business lines' ALM Committees.

# 8.2 STRUCTURAL INTEREST RATE RISK

Structural interest rate risk is measured within the scope of structural activities (commercial transactions, the associated hedging transactions and corporate centre transactions) for each of the Group's entities.

Structural interest rate risk arises mainly from the residual gaps (surplus or deficit) in each entity's fixed-rate forecasted positions.

# **Objective of the Group**

When steering structural interest rate risk, the main aim is to ensure the risk is managed by reducing each Group entity's exposure to structural interest rate risk as far as possible.

To this end, each entity and the Group as a whole are subject to sensitivity limits validated by the Finance Committee. Sensitivity is defined as the variation in the net present value of future (maturities covering more than 20 years) residual fixed-rate positions (surplus or deficit) for a 1% parallel increase in the yield curve (i.e. this sensitivity does not relate to the sensitivity of the annual net interest margin). The limit set at Group level is EUR 1 billion.

# Measurement and monitoring of structural interest rate risks

Societe Generale uses several indicators to measure the Group's overall interest rate risk. The three most important indicators are:

- interest rate gap analysis (the difference between outstanding fixed-rate assets and liabilities by maturity): the schedule of fixedrate positions is the main indicator for assessing the characteristics of the necessary hedging operations. It is calculated on a static basis;
- net present value sensitivity: an additional summary indicator used to set limits for the entities. It is calculated as the sensitivity of the net present value of the balance sheet to variations in interest rates. This measurement is calculated for all currencies to which the Group is exposed;
- interest margin sensitivity to variations in interest rates in various stress scenarios: this takes into account the sensitivity generated by future commercial productions over a three-year rolling horizon. It is calculated on a dynamic basis.

In order to quantify its exposure to structural interest rate risks, the Group analyses all fixed-rate assets and liabilities in the future. These positions come from transactions remunerated or charged at fixed rates and from their maturities.

Assets and liabilities are analysed separately, without any *a priori* matching. The maturities of outstanding assets and liabilities are determined on the basis of the contractual terms of transactions, conventional assumptions and models based on customers' historic behaviour patterns (particularly for sight deposits, regulated savings accounts, early loan repayments, and shareholders' equity).

Once the Group has identified its fixed-rate positions (surplus or deficit), it calculates the sensitivity (as defined above) to interest rate variations. This sensitivity is defined as the variation in the net present value of the fixed-rate positions for an instantaneous 1% parallel increase in the yield curve.

In addition to this analysis, the Group analyses the sensitivity of its fixed-rate position to different yield curve configurations (steepening and flattening). The measurement of the net interest income sensitivity over a three-year rolling horizon is also used by the Group to quantify the structural interest rate risk of significant entities.

Throughout 2016, the Group maintained overall sensitivity to interest rate risk at less than 1.5% of Group regulatory capital, and below the EUR 1 billion limit.

The following observations can be made with regard to the business lines' structural interest rate risk:

- within French Retail Banking, the outstanding amounts of customer deposits are generally considered to be fixed-rate. Macro-hedging is set up mainly through the use of interest rate swaps, in order to maintain net present value and income margin sensitivities to interest rate risk (on the basis of the scenarios adopted) within the limits set. At end-December 2016, the sensitivity of French Retail Banking's net present value to an instantaneous 1% parallel increase in the yield curve, based on its essentially euro-denominated assets and liabilities, was EUR -64 million;
- transactions with large corporates are generally micro-hedged and therefore present no residual interest rate risk;
- transactions with customers of the specialised financial services subsidiaries are generally macro-hedged and therefore present only a very low interest rate risk;
- commercial transactions at the Group's subsidiaries and branches located in countries with weak development of the financial markets can generate structural interest rate risk. Such entities may face difficulties in optimally hedging interest rate risk, but these positions, managed within limits, remain low at the Group level;
- corporate centre transactions are subject to hedging.

Sensitivity to interest rate variations within the Group's main entities, accounting for 84% of the Group's outstanding loans, and the corporate centre, represented EUR 111 million as at 31<sup>st</sup> December 2016 (for an instantaneous 1% parallel increase in the yield curve).

#### TABLE 83: MEASUREMENT OF THE ENTITIES' SENSITIVITY TO A 1% INTEREST RATE SHIFT, INDICATED BY MATURITY

(In EUR m)	< 1 year	1-5 years > 5	o years	Total
Amount of sensitivity (31.12.2016)	15	9	87	111
Amount of sensitivity (31.12.2015)	(36)	(10)	91	45

The results of the gap measurements (difference between liability and asset outstandings, at a fixed rate, by maturity) for the same entities are as follows (liabilities minus assets):

#### TABLE 84: INTEREST RATE GAPS BY MATURITY

(In EUR m)

Maturities	1 year	3 years	5 years	7 years
Amount of gap (31.12.2016)	(3,662)	8,200	340	3,030
Amount of gap (31.12.2015)	(6,340)	1,369	3,336	66

The Group analyses the sensitivity of earnings to variations in market interest rates using stress tests on the net interest margin.

At 31<sup>st</sup> December 2016, the Group's net interest margin sensitivity for 2017 was as follows:

# TABLE 85: SENSITIVITY OF THE GROUP'S INTEREST MARGIN

(In EUR m)	31.12.2016	31.12.2015
Parallel increase in interest rates of 200 bp	236	81
Parallel decrease in interest rates of 200 bp	(207)	(145)
Parallel increase in interest rates of 100 bp	115	43
Parallel decrease in interest rates of 100 bp	(64)	(85)
Steepening	(54)	(48)
Flattening	161	(87)

Calculations are based on aggregated estimates at 31<sup>st</sup> December from a scope of Group consolidated entities representing 8/10<sup>ths</sup> of outstanding loans, monitored in terms of net present value sensitivity, and from the corporate centre.

The dynamic vision of the balance sheet varies according to the amortisation of outstanding transactions and transaction renewals based on outstanding amounts budgeted for 2017. The steepening assumptions used allow for a 100bp increase in long-term rates with short-term rates remaining constant. The flattening scenario used for the simulation allows for a 100bp increase in short-term rates with long-term rates remaining constant.

The Societe Generale Group's interest margin sensitivity over the full year of 2017 is relatively low. In the event of a parallel shift in the yield curves of +200bp, the sensitivity is positive and represents less than 1% of net banking income.

The net interest margin sensitivity mainly stems from the impact on:

- customer deposits: in general, little or no interest is paid on deposits, and pricing is only partly impacted by fluctuations in interest rates, as the margin on deposits is mainly derived from reinvestment rates;
- new loan production, for which pricing is not adjusted as quickly as market rates.

The margin sensitivity on outstanding customer transactions results from the renewal of amounts due on reinvested deposits, and from the residual sensitivity to interest rate variations, which is low thanks to the hedging policy and the use of variable-rate positions.

The French and International Retail Banking activities are favourably exposed to a rise in interest rates, as deposits can then be reinvested at higher rates, while margins on outstanding loans remain stable. This increase in margin is, however, partially offset by the fall in margins on new loan production (loan rates do not adjust as quickly as market rates) and by an increase in funding costs. Conversely, Retail Banking activities are unfavourably exposed to a fall in interest rates as deposits are then reinvested at lower rates and the margin on outstanding loans falls due to prepayments. This fall in margin is partially offset by the rise in margins on new loan production (customer loan rates do not fall as quickly as market rates) and by a reduction in funding costs.

# 8.3 STRUCTURAL EXCHANGE RATE RISK

Structural exchange rate risk is mainly caused by:

- foreign currency denominated capital contributions and equity investments financed through the purchase of foreign currencies;
- retained earnings in foreign subsidiaries;
- investments made by certain foreign subsidiaries in a currency other than that used for their equity funding, for regulatory reasons.

# **Objective of the Group**

The Group's policy consists in calibrating the hedging of its net investments in foreign entities in such a way as to reduce the sensitivity of its Common Equity Tier 1 ratio to fluctuations in exchange rates as far as possible. To this end, it enters into hedging transactions to maintain a currency exposure reducing such sensitivity to within limits validated by the Finance Committee.

# Measurement and monitoring of structural foreign exchange rate risks

The Group quantifies its exposure to structural foreign exchange rate risks by analysing all assets and liabilities denominated in foreign currencies, arising from commercial transactions and the corporate centre.

The Group monitors structural exchange rate positions and manages the sensitivity of the Common Equity Tier 1 ratio to exchange rate fluctuations.

In 2016, structural positions monitoring reduced the Common Equity Tier 1 ratio sensitivity to currency fluctuations (sensitivity of the Common Equity Tier 1 ratio is managed within limits per currency set according to the Group's risk appetite in these currencies).

The table below presents the impact on the Group Common Equity Tier 1 ratio of a 10% currency depreciation or appreciation for 31st December 2016 .

# TABLE 86: SENSITIVITY OF THE COMMON EQUITY TIER 1 RATIO OF THE GROUP TO A 10% CURRENCY CHANGE (IN BASIS POINTS)

		on the Common Equity Tier 1 ratio of a 10% currency depreciation	Impact on the Common Equity Tier 1 ratio of a 10% currency appreciation		
Currency	31.12.2016	31.12.2015	31.12.2016	31.12.2015	
USD	2	(2)	(2)	2	
CHF	1	1	(1)	(1)	
RUB	0	0	0	0	
RON	0	0	0	0	
BRL	0	0	0	0	
GBP	(1)	(1)	1	1	
CZK	(1)	(1)	1	1	
NOK	(1)	(1)	1	1	
OTHERS	(2)	(4)	2	4	

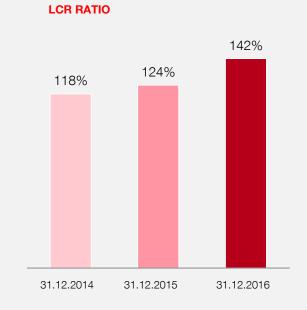
In 2016, structural positions monitoring reduced the Common Equity Tier 1 ratio sensitivity to currency fluctuations (sensitivity of the Common Equity Tier 1 ratio is managed within limits per currency set according to the Group's risk appetite in these currencies).

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# IN BRIEF

Liquidity risk corresponds to the risk of the Group not being able to meet its cash or collateral requirements as they arise and at a reasonable cost.

This section details the monitoring of liquidity and the management of this risk.



Liquidity reserve at end-2016 EUR 168 bn (Amount at end- 2015: EUR 167 bn)

# 9. LIQUIDITY RISK

Liquidity risk is defined as the risk of not being able to meet cash flow or collateral requirements when they fall due and at a reasonable price.

# 9.1. GOVERNANCE AND ORGANISATION

The principles and standards applicable to the management of liquidity risks are defined by the Group's governing bodies, whose duties in the area of liquidity are listed below:

- The Board of Directors:
  - establishes the level of liquidity risk tolerance as part of the Risk Appetite exercise, including the time period during which the Group can operate under conditions of stress ("survival horizon"),
  - meets regularly (at least quarterly) to examine the Group's liquidity risk situation;
- the Executive Committee:
  - sets budget targets in terms of liquidity based on proposals from the Group's Finance Division,
  - allocates liquidity to the businesses and Group Treasury based on proposals from the Group's Finance Division;
- the Finance Committee is the body responsible for monitoring structural risks and managing scarce resources. As such, it:
  - meets every six weeks, under the chairmanship of the Chief Executive Officer or a Deputy Chief Executive Officer, with the representatives of the Finance and Development Division's Risk Department and of the businesses,
  - oversees and validates the limits set for structural liquidity risk,
  - regularly monitors compliance with the budget and liquidity trajectory,
  - takes decisions, if necessary, on the implementation of corrective measures,
  - takes decisions, if necessary, on methodology issues regarding liquidity risk management,
  - examines regulatory changes and their impact.

The businesses are responsible for managing liquidity risk within their scope and are directly supervised by the Group Finance Division. They must ensure compliance with the regulatory requirements applicable to the entities falling within their scope of supervision.

The Group Finance Division manages and monitors liquidity risk through three separate departments, in compliance with the principle of separation between risk steering, execution and control functions:

- the Strategic and Financial Steering Department, responsible for:
  - establishing the Group's financial trajectory, in line with its strategic targets, regulatory requirements and market expectations,

- ensuring that liquidity steering is in line with the Group's other objectives in terms of profitability and scarce resources,
- proposing and monitoring the businesses' budget trajectory,
- monitoring the regulatory environment and developing liquidity steering standards for the businesses;
- the Balance Sheet and Global Treasury Management Department, responsible for:
  - ensuring execution of the Group's short-term and longterm funding plan,
  - supervising and coordinating the Group's Treasury functions,
  - monitoring the market and contributing its operational expertise to the establishment of Group liquidity steering objectives and the liquidity allocation for businesses,
  - managing the collateral used in refinancing operations (Central Banks, covered bonds, securitisation, secured funding), and monitoring the liquidity reserve,
  - managing the Group's central funding department (management of liquidity and equity within the Group), including the internal liquidity charts,
  - developing and implementing the emergency plan in the event of Group liquidity shortage;
- the ALM department, which reports to the Chief Financial Officer, is in charge of, in particular:
  - supervising and controlling the structural risks (liquidity, interest rates and exchange rates) to which the Group is exposed,
  - controlling the structural risk models and their compliance with the Group's rules and methodologies, and monitoring compliance with risk limits and management practices within the Group's divisions, business lines and entities.

Second-level supervision of the ALM models used within the Group and of the associated risk framework is conducted by a dedicated team within the Market Risk Department. Accordingly, this team provides an opinion on the methodological principles, parameters and backtests of liquidity models. It analyses proposals from the Finance Division regarding the risk indicators, stress test scenarios and liquidity and funding risk frameworks. It also conducts second-level controls of compliance with the risk limits defined under such framework.

# 9.2. THE GROUP'S APPROACH TO LIQUIDITY RISK MANAGEMENT

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

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

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

- The businesses must maintain low to nil static liquidity gaps within the operating limits of their activities, by using the Group's Central Treasury, which can, if needed, run an (anti) transformation position and manage it within the framework of the established risk limits.
- 2. Internal liquidity stress tests, established on the basis of systemic, specific or combined scenarios, are controlled at Group level. They are used to ensure compliance with the survival horizon established by the Board of Directors and to calibrate liquidity reserves. They are accompanied by a Contingency Funding Plan that sets out measures to be taken in the event of a liquidity crisis.

- 3. The businesses' funding needs (short-term and long-term) are determined on the basis of the development objectives for the franchises and in line with the Group's fund-raising targets and capabilities.
- 4. A plan for long-term funding, which complements the resources raised by the businesses, is designed to cover upcoming repayments and finance the growth of the businesses. It takes into account the Group's investment capabilities and aims to optimise the cost of fund-raising while complying with limits in terms of market concentration. Diversification in terms of issuers and investor pools is also sought and managed.
- 5. The Group's short-term resources are adapted to the financing of the businesses' short-term needs over periods appropriate to their management and in line with market concentration limits. As outlined above, they are adjusted in light of the liquidity reserve on the assets side, based on the established stress survival horizon as well as the Group's LCR target (Liquidity Coverage Ratio, see Regulatory Ratios section).
- The Group's liquidity steering takes into account compliance with the target regulatory ratios (LCR, NSFR, leverage), the pillars'/businesses' contributions to these ratios being subject to supervision.

Finally, liquidity is governed in terms of cost via the Group's internal transfer pricing scheme. Funding allocated to the businesses is charged to the latter on the basis of scales that must reflect the liquidity cost for the Group. This system is designed to optimise the use of external financing sources by businesses, and is used to monitor the equilibrium of balance sheet funding.

Societe Generale has undertaken a specific review of its liquidity risks and believes that it is able to meet its upcoming maturities.

# 9.3. REFINANCING STRATEGY

The Group's financing strategy is based on the following principles:

- the Group's stable funding resources (including shareholders' equity, customer deposits and medium/longterm market resources) finance the long-term needs of the businesses (including tangible and intangible assets, customer loans and the portfolio of available-for-sale or held-to-maturity securities);
- short-term market resources finance the Group's shortterm assets, which are predominantly carried by Global Banking and Investor Solutions' Global Markets pillar;
- the Group maintains a liquidity reserve to cover outflows in situations of stress.

#### MARKET FINANCING

The Group's market resources totalled EUR 215 billion at 31st December 2016. Of this total, EUR 87 billion have a remaining maturity of less than one year, of which EUR 29 billion correspond to debt securities issued with an initial medium/long-term maturity (more than one year) and EUR 58 billion to short-term market resources.

Group short-term unsecured market resources consist of unsecured notes issued under the Group's short-term programmes (mainly Certificates of Deposit, promissory notes and commercial paper), and deposits from banks and financial customers. The majority of the short-term market resources are issued by the Group's Central Treasury to international institutional investors under its short-term programme. The Group's Central Treasury adheres to diversification thresholds on its funding sources by counterparty and by currency. Asset-Backed Commercial Paper vehicles contribute to the Group short-term market resources since 1st January 2014, following their inclusion in the consolidation scope with the application of IFRS 10.

The amount of group short-term unsecured market resources totalled EUR 58 billion at 31st December 2016, against EUR 55 billion at 31st December 2015, and remained stable overall in 2016, after a significant reduction during 2014 (EUR -38 billion) according to the Group' s strategy to reduce the share of short-term wholesale funding in the funding structure of the balance sheet.

Medium/long-term market resources (including the portion of securities originally issued with a maturity of more than one year and maturing within the year) totalled EUR 157 billion at 31st December 2016, against EUR 155 billion at 31st December 2015. These consist of long-term interbank liabilities (long-term credit lines granted by central banks, banks and international financial institutions, etc.), and medium/long term debt securities, the breakdown of which reflects the Group's policy on the diversification of funding sources. The Group has access to large and complementary investor pools via:

- senior vanilla issues in the form of public issues or private placements;
- covered bonds issued by SG SFH vehicles; and SG SCF as well as by the Caisse du Refinancement et de l'Habitat;
- senior structured issues issued by Societe Génerale SA and distributed to institutional investors and, to a large extent, to individual customers (via retail and private banking networks belonging to the Group or its partners);
- subordinated debt (Tier 2 debt instruments) issued by Societe Generale SA, in addition to Group Tier 2 and Tier 1 issues booked to equity.

Further to the vote of the Sapin 2 law creating a new type of debt instrument, the Group issued its first senior non-preferred debt in December 2016.

Furthermore, access to diversified investor pools is ensured by a wide array of Group issuers: Societe Generale SA, Crédit du Nord and the IBFS subsidiaries issuing secured (securitisations, covered bonds) and unsecured notes. IBFS issues, along with its deposit inflows and bilateral borrowings, are aimed specifically at increasing the funding autonomy of its subsidiaries.

# 9.4. DISCLOSURE ON ASSET ENCUMBRANCE

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

Total Group encumbrance amounts to 26% in 2016, measured according to EBA definition. Securities encumbrance is 68%, while loan encumbrance is 10%.

The Group loan encumbrance rate remains limited overall. 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 around one third of the total, stemming mainly from housing loans. Historically, the encumbered loans are in priority affected as collateral for long-term refinancing mechanisms which are broadly used by banks, for covered bonds, secured funding (SG SFH, SG SCF and CRH), or securitizations. More recently, the emergence of long-term refinancing mechanisms implemented by the ECB (i.e. LTRO and then TLTRO) led SGPM to increase its volume of encumbered loans.
- At subsidiary level, the loan encumbrance rate is limited to less than 10%<sup>2</sup> overall, with discrepancies between entities due to different funding strategies. The highest levels of secured funding correspond to entities which have implemented external funding programmes through securitisations such as BDK and ALD, covered bonds like Delta Credit (Russian mortgage subsidiary), 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, intra-group encumbrance (i.e. the share of loans encumbered at entity level but not necessarily encumbered at Group level) represents 2% of the total amount of the Group's encumbered loan collateral. This stems mainly from the housing loans portfolio brought by Crédit du Nord to SFH, and to a lesser extent by BFCOI (Réunion), as well as Genecomi, Genefim, Sogefimur and CGA.
- Securities encumbrance is concentrated in SGPM and its branches, where Group market activities are located.

EBA requirement: (b) information on over-collateralisation; (EBA GL 2014/03 Title II.8)

 Regarding major long-term secured funding mechanisms, over-collateralisation on covered bonds vehicles was 148% on SG SCF and 114% on SG SFH as of 31/12/2016.

# EBA requirement: (c) "general description of terms and conditions of the collateralisation agreements entered into for securing liabilities"

- Secured liabilities can be securities or loans. The encumbrance of receivables generated by secured liabilities is formalised by a loan agreement and a guarantee agreement governed, as the case may be, by the provisions of articles L.313-23 and following of the Monetary and Financial Code (the so-called "Dailly" Act) or by articles L.211-38 and following of said code (transposition of the Financial Collateral Directive into French law).
- The title to the encumbered receivables is transferred by the borrower of the secured liability as a guarantee to the lender, the beneficiary of the guarantee. The beneficiary of the guarantee is legally the owner of the receivables and has an obligation to return the receivables to the borrower upon the redemption of the debt (formalised by a loan agreement). The underlying debtors of the transferred receivables are not informed of the transfer as long as the borrower of the secured liability continues to pay in a timely manner the amounts due on the loan(s) and fulfils the obligations under the loan agreement and the guarantee agreement.
- The borrower undertakes to transfer additional receivables that comply with eligibility criteria on a periodic basis as is necessary to maintain a certain minimum level of collateralisation. The eligibility criteria are defined under the guarantee agreement. The transfers are formalised by the delivery of a transfer form from the borrower to the lender. The borrower undertakes to flag the transferred receivables in its systems.
- Additionally, the guarantee agreement provides for the notification of the underlying debtors of the transferred receivables in the event of a default by the borrower under the loan(s). Following such an event, the debtors would pay their instalments to the lender, the beneficiary of the guarantee, directly, thus gradually redeeming the secured liability.

\* (1) Median values on quarterly data

<sup>\* (2)</sup> According to a methodology consisting of first encumbering the least liquid eligible assets (encumbered loans/total loans)

The following events generally constitute events of default that allow the lender to enforce the guarantee:

- any failure to pay, unless for technical reasons and if resolved within a certain timeframe.
- any important or significant failure to perform by the borrower under its obligations pertaining to the loan and/or the guarantee agreement, notably regarding its obligation to maintain a minimum level of collateralisation through the transfer of additional receivables; bankruptcy.

Note:

- most secured liability facilities must remain secured until their maturity.
- some secured liability facilities need only be secured if SG's credit rating is below a certain level, which means that some liabilities will not be secured before their maturity.
- all secured liability facilities, if they are secured at all, require over-collateralisation, the degree of which can vary based on SG's credit rating.

## TABLE 87 - TEMPLATE A - ASSETS

		31.12.2016							
		Carrying amounts of encumbered assets	Fair value of encumbered assets	Carrying amounts of unencumbered assets	Fair value of un encumbered assets				
(In EUR m)		010	040	060	090				
010	Assets of the reporting institution	139,495		1,147,110					
030	Equity instruments	28,575	28,575	34,630	34,630				
040	Debt securities	47,913	47,913	72,069	72,069				
120	Other assets	2,945		342,688					

## TABLE 88 - TEMPLATE B - COLLATERAL RECEIVED

		31.12.2016				
		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 EUR ı	n)	010	040			
130	Collateral received by the reporting institution	298,301	73,054			
150	Equity instruments	55,182	12,244			
160	Debt securities	238,909	61, 591			
230	Other collateral received	0	0			
240	Own debt securities issued other than own covered bonds or ABSs	3,324	522			

#### TABLE 89 - TEMPLATE C - ENCUMBERED ASSETS/COLLATERAL RECEIVED AND ASSOCIATED LIABILITIES

	31.12.2016				
	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered			
(In EUR m)	010	030			
010 Carrying amount of selected financial liabilities	325, 639	326,854			

# 9.5. 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: nontransferable excess cash (according to the regulatory ratio definition) in subsidiaries is therefore not included in the Group liquidity reserve.

The liquidity reserve includes:

- central bank deposits, excluding mandatory reserves;
- High-Quality Liquid Assets (HQLAs), which are securities that are quickly transferable 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 reviewed regularly by a special committee comprising the Finance Division, the Risk Division and the Management of the Global Banking and Investor Solutions pillar, and is adjusted by authorisation of the Finance Committee.

#### TABLE 90 - LIQUIDITY RESERVE

(In EUR bn)	31.12.2016	31.12.2015
Central bank deposits (excluding mandatory reserves)	73	64
HQLA securities available and transferable on the market (after haircut)	79	90 <sup>(1)</sup>
Other available central bank- eligible assets (after haircut)	16	13
Total	168	<b>167</b> <sup>(1)</sup>

<sup>(1)</sup> Data adjusted vs. 2015 published data –HQLA securities previously published at EUR 92bn at 31.12.2015.

# 9.6. 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 and compares funding needs with stable resources over a one-year period.

The Basel Committee stabilised its final version of the texts pertaining to the LCR in January 2013 and those on the NSFR on  $31^{\rm st}$  October 2014.

The transposition of Basel 3 into European Union law under CRD4 and CRR1 was published on 27<sup>th</sup> June 2013, for implementation as from 1<sup>st</sup> January 2014. The French transposition was published in the French Official Journal (*Journal Officiel*) on 5<sup>th</sup> November 2014.

The LCR definition was finalised, on the basis of technical standards issued by the EBA, through a Delegated Act of the European Commission on 10th October 2014. The LCR entered into force at European level on 1st October 2015. The corresponding minimum requirement was set at 70% for 2016,

and will increase gradually until reaching 100% as from 1st January 2018.

For the NSFR, the European Commission presented a proposal in November 2016 for transposition of the Basel regulations, which will be discussed at a trialogue meeting (Parliament, Commission, Council). The entry in force of the European NSFR will depend on the duration of the legislative process and is not expected to take place before 2019. Societe Generale actively continued its work on transposing the Basel/European legislation and translating it into management standards within the Group. At Group-level, the LCR is now managed based on the European standards.

Since implementation of the European regulatory LCR requirement in October 2015, with a 60% minimum requirement, increased to 70% on 1<sup>st</sup> January 2016, Societe Generale's LCR has at all times stood at a level comfortably exceeding 100%.

At end-2016, the LCR was higher than at end-2015 and well above regulatory requirements, at 142% (vs. 124% at end-2015).

This situation is the reflection of the significant efforts made since the crisis to reinforce the Group's liquidity reserves, to extend the average maturity of its liabilities, and to reduce reliance on shortterm wholesale funding. Above all, it also demonstrates the Group's ability to withstand a severe combined specific and widespread liquidity crisis.

# 9.7. BALANCE SHEET SCHEDULE

The main lines comprising the Group's financial liabilities are presented in Note 3.13 to the consolidated financial statements, under the following template:

#### TABLEAU 91 - BALANCE SHEET SCHEDULE

### FINANCIAL LIABILITIES

		31.12.2016									
(In EUR m)	Note to the consolidated financial statements	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL					
Due to central banks		5,235	2	1	0	5,238					
Financial liabilities at fair value											
profit or loss, excluding derivatives	Note 3.1	234,561	8,103	7,879	16,439	266,982					
Due to banks	Note 3.6	50,595	9,697	20,224	2,068	82,584					
Customer deposits	Note 3.6	336,689	29,867	29,134	25,312	421,002					
Securitised debt payables	Note 3.6	31,005	21,063	35,437	14,697	102,202					
Subordinated debt	Note 3.9	296	90	2,302	11,415	14,103					

Note : 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. Consequently, the impact of the debt revaluation linked to own credit risk and interest accrued at 31<sup>st</sup> December 2016 are not scheduled.

	31.12.2015								
-	Note to the consolidated								
(In EUR m)	financial								
	statements	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL			
Due to central banks		6,907	3	41		6,951			
Financial liabilities at fair value									
profit or loss, excluding derivatives	Note 3.1	189,718	17,101	22,946	34,989	264,753			
Due to banks	Note 3.6	63,952	6,306	22,323	2,871	95,452			
Customer deposits	Note 3.6	297,297	29,249	28,974	24,112	379,631			
Securitised debt payables	Note 3.6	25,126	25,095	41,542	14,649	106,412			
Subordinated debt	Note 3.9	319	1,155	2,613	8,959	13,046			

Symmetrically, the main lines comprising the corresponding financial assets are presented below.

#### FINANCIAL ASSETS

(In EUR m)	Note to the consolidated financial statements	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL
Cash, due from central banks		93,180	672	1,368	966	96,186
Financial assets at fair value						
profit or loss, excluding derivatives	Note 3.1	319,406	12,805			332,211
Available-for-sale financial assets	Note 3.3	128,861	8,526		2,017	139,404
Due from banks	Note 3.5	42,236	4,264	11,299	1,703	59,502
Customer loans	Note 3.5	103,586	52,652	147,769	93,636	397,643
Lease financing and similar agreements	Note 3.5	2,772	5,821	15,378	4,887	28,858

(In EUR m)	Note to the consolidated financial				- 1/20	
	statements	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL
Cash, due from central banks		75,786	636	1,319	824	78,565
Financial assets at fair value						
profit or loss, excluding derivatives	Note 3.1	328,013	2,991			331,004
Available-for-sale financial assets	Note 3.3	123,718	5,983		4,486	134,187
Due from banks	Note 3.5	57,178	5,578	7,969	957	71,682
Customer loans	Note 3.5	79,183	52,527	144,103	102,234	378,047
Lease financing and similar agreements	Note 3.5	2,506	5,460	14,153	5,085	27,204

31.12.2015

It should be noted that, 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 three months.
  - Positions measured using observable data other than quoted prices (L2 accounting classification): maturity of less than three months.
  - Positions measured mainly using unobservable market data (L3): maturity of three months to one year.

- 2. Available-for-sale assets (insurance company assets and Group liquidity reserve assets in particular)
  - Available-for-sale assets measured using prices quoted on active markets: maturity of less than three months.
  - Bonds measured using observable data other than quoted prices (L2): maturity of three months to one year.
  - Lastly, other securities (shares held long-term in particular): maturity of more than five years.

As regards the other lines comprising the balance sheet, other assets and liabilities and their associated conventions can be broken down as follows:

## OTHER LIABILITIES

		31.12.2016								
(In EUR m)	Note to the consolidated financial statements	Not scheduled	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL			
Revaluation difference on portfolios										
hedged against interest rate risk		8,460					8,460			
Tax liabilities	Note 6			984	0	460	1,444			
Other liabilities	Note 4.4		94,212	0	0	0	94,212			
Non-current liabilities held for sale	Note 2.5		3,612				3,612			
Underwriting reserves of insurance										
companies	Note 4.3		13,022	7,890	29,965	61,900	112,777			
Provisions	Note 8.3	5,687					5,687			
Shareholders' equity		61,953					61,953			

	31.12.2015							
(In EUR m)	Note to the consolidated financial statements	Not scheduled	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL	
Revaluation difference on portfolios								
hedged against interest rate risk		8,055					8,055	
Tax liabilities	Note 6			1,108		463	1,571	
Other liabilities	Note 4.4		83,083				83,083	
Non-current liabilities held for sale	Note 2.5			526			526	
Underwriting reserves of insurance								
companies	Note 4.3		11,199	7,710	29,195	59,153	107,257	
Provisions	Note 8.3	5,218					5,218	
Shareholders' equity		59,037					59,037	

## OTHER ASSETS

			31	.12.2016			
	Note to the consolidated						
(In EUR m)	financial statements	Not scheduled	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL
Revaluation difference on portfolios							
hedged against interest rate risk		1,078					1,078
Held-to-maturity financial assets	Note 3.9					3,912	3,912
Tax assets	Note 6	6,421					6,421
Other assets	Note 4.4		84,756				84,756
Non-current assets held for sale	Note 2.5		3,569	683			4,252
Investments in subsidiaries and affiliates accounted for by the equity method						1,096	1,096
Tangible and intangible fixed assets	Note 8.4					21,783	21,783
Goodwill	Note 2.2					4,535	4,535

(In EUR m)	31.12.2015						
	Note to the consolidated financial statements	Not scheduled	0-3 M	3 M-1 YR	1-5 YRS	> 5 YRS	TOTAL
Revaluation difference on portfolios							
hedged against interest rate risk		2,723					2,723
Held-to-maturity financial assets	Note 3.9					4,044	4,044
Tax assets	Note 6	7,367					7,367
Other assets	Note 4.4		69,398				69,398
Non-current assets held for sale	Note 2.5		104	67			170
Investments in subsidiaries and							
affiliates accounted for by the						1,352	1,352
equity method							
Tangible and intangible fixed assets	Note 8.4					19,421	19,421
Goodwill	Note 2.2					4,358	4,358

- 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. Held-to-maturity financial assets have a residual maturity of more than five years.
- 3. Other assets and Other liabilities (guarantee deposits and settlement accounts, miscellaneous receivables) are considered as current assets and liabilities.
- 4. The notional maturities of commitments on derivative instruments are presented in Note 3.13 to the consolidated financial statements. The net balance of transactions in derivatives measured at fair value through profit or loss on the balance sheet is EUR -6,135 million (according to the rules set out above, this would be classified as a trading liability < 3 months, see Note 3.4 to the consolidated financial statements).
- 5. Non-current assets held for sale have a maturity of less than one year, as do the associated liabilities.
- 6. Investments in subsidiaries and affiliates accounted for by the equity method and Tangible and intangible fixed assets have a maturity of more than five years.
- 7. Provisions and shareholders' equity are not scheduled

# IN BRIEF

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.

This section This section describes the compliance system.

# 10. COMPLIANCE AND REPUTATIONAL RISK

# **10.1 COMPLIANCE**

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

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

Complying with these commitments is not only the responsibility of a few experts, but of all Group employees, who must demonstrate compliance and integrity in their daily tasks. Accordingly, the Group has adopted an organisation and a body of strict doctrines, procedures and rules that are updated regularly.

## The compliance system

The system for prevention of compliance risks is based on a shared responsibility binding all core businesses, Corporate Divisions and Compliance function employees:

- operational entities must integrate compliance with laws and regulations, the rules of good professional conduct, and the Group's internal rules into their daily work;
- the Compliance function has two main duties: (i) advising and assisting the operational entities so that they may complete their tasks in compliance with their professional and regulatory obligations, and in keeping with the Group's commitments; and (ii) monitoring and assessing the relevance and efficiency of the system for monitoring and controlling compliance risks.

The Compliance function, reporting to the Group's Corporate Secretary in his capacity as Group Chief Compliance Officer, comprises employees of the Compliance Department within the Corporate Secretariat, and officers appointed within the core businesses and subsidiaries.

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

The Group's Corporate Secretary is responsible for the overall coordination of the Compliance function and of relations with the authorities in this regard. He is assisted in his duties by the Head of Group Compliance.

The efficiency of the compliance system is continuously monitored and strengthened at the highest Group level:

- The Group's Corporate Secretary in his capacity as member of the Executive Committee is informed of and involved in the most important decisions. He attends all meetings of the Audit and Internal Control Committee (CACI) and of the Risk Committee (CR), where he regularly gives presentations;
- The Societe Generale Group's Board of Directors conducts an annual review of the measures to prevent and control compliance risks.
- a Compliance Committee (COMCO) at General Management level, comprising the members of the Group Executive Committee, meets quarterly (as a minimum) to determine the

Group's broad outlines and principles in terms of compliance. At this meeting, the Head of Group Compliance presents the key events of the period and provides an overview of the compliance system, the main regulatory developments, and the status of projects under way. Every quarter, each member of the Executive Committee receives a reputational dashboard, a compliance dashboard, and reports on major compliance-related issues;

Once a month, the Group's Corporate Secretary convenes the Group Compliance Committee (CCG), with the participation of the Head of Group Compliance, compliance officers from the various core businesses, and those from the Finance and Development Division, the Corporate Resources and Innovation Division, the Head of Internal Control Coordination, the Chief Legal Officer, and representatives from the Operational Risk Department and General Inspection. The Committee reviews the most significant events of the period for the whole Group, decides on the measures to be implemented, and monitors their implementation. The major legal and regulatory oversight items are presented by the Chief Legal Officer. The compliance system of the core businesses and Corporate Divisions is assessed on a regular basis.

#### THE COMPLIANCE DEPARTMENT

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

The work carried out by the Compliance Department concerns the following main tasks:

- the definition and implementation of the overall normative framework, the adaptation and operational implementation of said normative framework within its scope of hierarchical authority, or else the monitoring of its implementation within its scope of functional supervision;
- the development, in collaboration with the Legal Department, of procedures intended to ensure compliance with the laws and regulations applicable to banking and financial activities, and the standards of conduct set by General Management;
- keeping compliance directives and guidelines operational at Group level, approving the compliance rules included in the guidelines and procedures of the core businesses and business lines;
- the independent assessment of compliance risk management within the entities/activities with a major impact on the Group's risk profile, and individually with respect to regulated employees, in compliance with regulations, in particular CRD IV

- the consolidation and monitoring of significant events within all entities, thanks in particular to the quarterly production of Group management dashboards:
  - the reputational risk dashboard measures the Societe Generale Group's reputation based on various key internal indicators (customer complaints, social climate, cybercrime and fraud, regulator relations) and external indicators (e-reputation, external barometers, corporate and social responsibility, and supplier relations),
  - the compliance dashboard presents the key events for the quarter. It is organised by topic: financial security, customer protection, relations with the regulatory authorities, market integrity;
- reporting to the Group Executive Committee and, in coordination with the Legal Department, monitoring relations with banking and regulatory supervisors;
- administrative tasks and preparing files for the Group Compliance Committee.

The Compliance Department is organised into departments dedicated to the Group's businesses and into cross-business departments.

Four departments are dedicated to the businesses: (i) "Retail Banking and Financial Services" (France & International), (ii) "Global Banking and Investor Solutions", (iii) "Private Banking", and (iv) "Insurance", with a manager specially appointed and reporting to the Head of the Compliance Department, except for the department dedicated to the Insurance business line, which reports to him functionally. Subsidiary compliance officers in France and abroad report to the business line compliance officers, through a hierarchical or functional link, depending on the local regulations. The hierarchical scope of the Compliance Officers of the Regional Departments of the France network under the Societe Generale brand.

The cross-business departments are responsible for developing their skills and expertise across the Group:

- "Group Financial Security" (SFG) for Anti-Money Laundering and Countering Terrorist Financing actions (AML/CTF), Know your Customer obligations (KYC), and compliance with embargoes and sanctions;
- "Expertise and Coordination Governance" (GEA) for updates to the function's regulatory framework, awareness-raising and training of employees regarding compliance risks and the coordination of regulatory projects at Group level;
- "Control" (CTL) for the coordination and implementation of a permanent second-level compliance control system, oversight of personnel operations covered by a code of conduct, the management of the Group Compliance Committee (CCG), and the production of "Group" dashboards (compliance and reputation);
- "Global and strategic development" (GSD) assists the Head of Group Compliance with respect to peer comparisons, the anticipation of and support with regulatory developments, and carrying out transformation and efficiency projects. In particular, the department coordinates the Compliance Transformation Programme (CTP) that is being implemented by the Compliance function.

#### **GROUP FINANCIAL SECURITY**

Societe Generale has a system to prevent and detect risks related to money laundering and terrorism financing, in addition to non-compliance with embargoes and financial sanctions. This system is organised as follows:

- The Group Financial Security Department (SFG) within the Compliance Department ensures the overall coordination of the system across the Group, defines the applicable normative framework, and ensures the consistency of local provisions;
- Business line compliance officers implement the Financial Security system within their scope;
- Anti-Money Laundering Officers (AMLO) ensure the implementation of this system within their entities.

The entities located abroad must apply measures at least equivalent to French regulatory obligations and to the Group policy, while complying with local obligations. When local regulations impose additional obligations, said obligations must also be applied.

The Group Financial Security Department (SFG) organises the dissemination and sharing of information relative to financial security risks, which includes the approval of customers and transactions presenting the highest risk with regard to criteria defined and shared with the core businesses; the organisation of information circuits enabling the reporting to Corporate Divisions of suspicious activity carried out within all entities, except when local regulations prohibit such reporting; the centralisation at Group level of all information necessary to fight money laundering and terrorism financing, and to comply with embargoes and sanctions;

The SFG Department reports suspicious activity to TRACFIN (a service of the French Ministry of Finance) for all of the Group's French entities (except Crédit du Nord and Boursorama Banque, which report directly), and submits reports on asset freezes and authorisation requests to the French Treasury for Societe Generale SA. For entities and subsidiaries located outside France, the AMLOs report suspicious activity to the equivalent local authorities.

A team at the SFG Department level is dedicated to updating scenarios and alert thresholds, as well as monitoring the correct configuration of the Group's supervisory tools.

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

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

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

reporting/evaluation tools that provide reports/statements on specific characteristics of an entity, core business, business line or customer to notify the relevant authorities (regulators, senior management, etc.). The Compliance function also has a tool for mapping and assessing compliance risks, a reporting tool for personal transactions, and a set of tools to manage lists of insiders and possible conflicts of interest.

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

# Implementation of compliance policies

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

Measures aimed at increasing the efficiency of the AML/CTF system and the vigilance of Group employees were continued in 2016.

In particular, we can mention:

- the strengthening of Corporate Division teams dedicated to reporting suspicious activity, across all of the Group's French entities, which was intensified during the year.
- the implementation of the COSI project (regulatory, systemic reporting to TRACFIN), which includes cash deposits/withdrawals;
- the roll-out of a training programme for "AML/CTF" certification, dedicated to financial security officers;
- continuation of the project to optimise the processing and monitoring of individual financial security files and information sharing among the various core businesses;
- preparation of the entry into force of the Fourth European Anti-Money Laundering Directive.

#### KNOW YOUR CUSTOMER (KYC)

As part of the Know your Customer process, the Group's directive on customer knowledge obligations in terms of financial security was overhauled and published in July 2016.

In operational terms:

- more attention is given to the regular review of customer records;
- the scope covered by the project to centralise the filtering of politically exposed persons (PEP) was increased, within the limits of local regulations;
- the pooling and sharing of customer knowledge information was expanded in accordance with local regulations.

Furthermore, a financial crime risk client rating project (fccr) was launched in the beginning of q2 2016 to define a common rating method for the group regarding its customers' financial security risk profiles.

#### EMBARGOES AND FINANCIAL SANCTIONS

In terms of embargoes, the international environment in 2016 remained very challenging, with a high level of complexity. Differences between the European and American regimes are likely to generate significant operational risks for financial institutions. In view of prevailing uncertainties, the Societe Generale Group has not considered resuming its commercial activities with Iran at this stage.

The year 2016 is characterised in particular by:

- the continued strengthening of the workforce dedicated to embargoes in the Compliance function, in particular within the corporate team;
- the harmonised operation of filtering tools, in particular by standardising their configuration within the Group;
- the centralised processing of alerts with the integration of new entities;
- the overhaul of the "embargoes and financial sanctions" risk mapping methodology.

An e-learning programme concerning specifically the risks related to international sanctions was made compulsory from mid-2015 for all Group employees. At end-2016, the roll-out of this training was practically finalised across the entire Group. The most exposed people were able to benefit from face-to-face training dedicated to their specific activities.

#### ANTI-CORRUPTION MEASURES

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

In 2000, Societe Generale made certain commitments as part of the Wolfsberg Group and, in 2003, under the United Nations Global Compact. The anti-money laundering and countering terrorist financing mechanism includes monitoring the use of the banking system by third parties to commit acts of corruption.

To fight corruption, Societe Generale applies strict principles which form part of its Code of Conduct and comply with the strictest regulations in this regard, including the UK Bribery and Corruption Act (2011). These provisions are transposed in an "anti-corruption" directive applicable to all of the Group's employees. A key control within the body of normative controls checks compliance with internal and external obligations with respect to the fight against corruption.

In order to strengthen the vigilance of Group employees, a training module pertaining to awareness-raising in the fight against corruption was implemented in 2013.

The adoption on 8<sup>th</sup> November 2016 by the French Parliament of a new law regarding transparency, the fight against corruption and the modernisation of the economy ("SAPIN II") reconciles the French legal framework with the strictest international practices. With a view to its entry into force in June 2017, Societe Generale reviewed its system in 2016. The Group has a solid normative framework, in order to ensure it continues to meet current standards. In 2017, the Group will conduct initiatives aimed at further strengthening its efficiency.

#### EMPLOYEE ETHICS

Compliance with ethical policies is a key obligation under Societe Generale's rules of conduct. Procedures and their proper application are closely examined, including those related to the supervision of outside personnel (employees of service providers, temporary employees and trainees).

The requirements of the new European regulations regarding market abuse ("MAD II/MAR"), effective as of 3<sup>rd</sup> July 2016, have been incorporated in the Group's internal monitoring system regarding the fight against insider trading and market manipulation.

#### CONFLICTS OF INTEREST

The Group has a guideline on the prevention and management of conflicts of interest, which specifies the principles and mechanisms implemented. This guideline was updated at the end of 2016 to take into consideration the regulatory changes under way (see the "MIF2" European regulation on customer protection).

It covers the two categories of potential conflicts of interest: firstly, those that could occur between the Group and its customers, or between the Group's customers; and secondly, those that could occur between the Group and its employees (in particular in relation to activities involving an employee's personal interest and/or professional obligations). It sets out the obligations for identifying potential conflicts of interest, which should be entered into a tool for mapping or registering conflicts of interest.

#### MARKET ABUSE

As part of the entry into force of the reform of the market abuse system as of 3<sup>rd</sup> July 2016 ("Market Abuse" regulation of 12<sup>th</sup> June 2014 and "MAD II/MAR" Directive), the Compliance Department coordinated a cross-business project for the regulatory implementation and monitoring of action plans defined by the business lines. To this end, practical solutions were launched while a sustainable approach was created where necessary.

Special attention was given to the modernisation of automated detection and analysis tools. The system also benefited from the coordination between the Corporate Divisions and businesses, a training programme for the staff concerned, and the development of normative documentation. The targeted solution will be implemented in parallel in 2017.

## EXCEEDING OWNERSHIP THRESHOLDS

The cross-business tool for monitoring equity interests and voting rights held by Societe Generale in listed issuers ensures worldwide compliance (103 countries) with regulations on the exceeding of share ownership thresholds (pursuant to the law or the by-laws, or during public offer periods). It includes all forms of shares and derivatives with underlying equity securities held. These holdings are calculated in accordance with the specific rules in each country.

## SUPERVISING CUSTOMER PROTECTION

The supervision of customer protection is a field enjoying increasing attention from banking supervisors and regulators. Penalties are likely to increase even further. The Group has made significant progress in its customer protection approach (better knowledge of incidents, implementation of remediation plans, normative documentation, and management of regulatory projects).

Among the actions taken, we can mention the following:

completing the new customer protection questionnaire of the French Prudential Supervisory and Resolution Authority (Autorité de contrôle prudentiel et de résolution – ACPR);

- a programme structure within the Compliance function, supervising the implementation of the "MIF2" regulation;
- a MOOC (Massive Online Open Course) developed in collaboration with the Group Risk function: it meets the need to provide extensive cross-business training and contributes to the vocational training of the supervisory functions regarding customer protection.

## CLAIMS AND MEDIATION

A claim is treated foremost as a commercial action which contributes to customer satisfaction.

Significant progress has been made by the core businesses over the last three years in terms of processing customer claims. The core businesses benefit from ad hoc governance, an organisation, human and IT resources, formalised procedures, together with quantitative and qualitative monitoring indicators. The progress observed is also the result of significant awarenessraising and training initiatives conducted among employees.

A Group "Customer complaint processing" guideline was published in January 2017. This guideline includes recommendations from the national regulator, and "MIF2" regulatory requirements, as part of strengthening customer protection measures in Europe.

#### MANAGEMENT OF REPUTATIONAL RISK

The management of reputational risk is governed by an internal directive. The control set-up procedures implemented are intended to prevent, identify, assess and control risks.

It is coordinated by the Compliance Department, which:

- defines the relevant controls in terms of reputational risk management;
- supports Group employees, and more particularly the compliance control officers of the core businesses, in their strategy for preventing, identifying, assessing and controlling reputational risk;
- offers and updates training programmes to raise awareness of reputational risk;
- defines, analyses and communicates the results of reputational risk management tools (specific dashboard) on a quarterly basis to members of the Group Executive Committee (COMEX) and, on a half-yearly basis, to the Audit and Internal Control Committee (CACI).

## OTHER REGULATORY MATTERS

In 2016, in cooperation with the business lines, the Compliance function continued development and compliance workshops covering numerous important regulations, in particular: the French banking law of 26<sup>th</sup> July 2013, the Volcker reforms, the DFA ("Dodd-Frank Act"), the EMIR ("European Market Infrastructure Regulation"), the Eckert Act, the FATCA ("Foreign Account Tax Compliance Act"), and Common Reporting Standards ("CRS").

# NORMATIVE DOCUMENTATION AND INFORMATION SHARING

To complete its assignments, the Group Compliance function relies on normative documents (directives, guidelines and procedures) which are regularly updated.

In 2016, the Compliance function developed a "Click & Know" booklet to facilitate the knowledge and understanding of normative documentation relating to compliance. "Click & Know" is a practical tool intended to help employees better understand regulatory requirements.

#### THE PERMANENT CONTROL SYSTEM

The Compliance function is one of the three control functions of the Societe Generale Group (together with the risk and finance functions) that implements permanent second-level control to review the quality of the checks performed by the businesses.

The roll-out of this control system is currently an important part of the second line of defense.

## **Compliance and the Code of Conduct**

Compliance with ethical rules which meet the highest professional standards is part of the Societe Generale Group's commitments.

Numerous culture and conduct workshops have been conducted since 2006. The Group has a set of strict good conduct doctrines and rules. The Group's Code of Conduct, updated in October 2016, is covered by an internal directive including all these workshops (see Chapter 5.2 Code of Conduct).

The individual and group behaviour principles and rules promulgated go beyond the strict application of current laws and regulations, in particular when the ethical standards in certain countries are not consistent with the values and commitments applied by the Group.

This directive applies to all employees, regardless of their responsibility level, as well as to Group managers, and also specifies alert procedures when a special situation so requires. The Group protects whistleblowers.

Responsible banking relies on the following:

- not working with a customer or counterparty for which it is not possible to gather satisfactory information to know that person;
- understanding how to assess the economic reality of a transaction;
- being able to justify each decision under any circumstances.
- As a result, the Group:
- shall refrain from completing transactions in countries or entering into relationships with natural persons or legal entities whose activity would violate the laws or principles that guide a banker's behaviour;
- will not work with customers or counterparties in transactions for which it cannot assess the economic reality, or where there is an absence of transparency which could lead to the conclusion that they violate accounting or ethical principles;
- provides information that is accurate, clear and not misleading on the products and services it offers, and verifies that said products and services are suited to customer needs;
- ensures, under all circumstances, the prevention of any conflicts of interest, the confidentiality of privileged information and the security of personal data, and guarantees the ethical and transparent use of such information.

# The Compliance function's transformation programme

The Group has launched a programme covering the 2015-2020 transformation period of the Compliance function, aimed at (i) strengthening compliance risk control through heightened vigilance and awareness-raising applicable to all players, including the business divisions, their support staff and the Corporate Divisions, (ii) increasing the operational efficiency of all

related processes, and (iii) meeting the requirements of supervisory and regulatory authorities in the long term.

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This programme provides for updated governance and greater resources allocated to the Compliance function, whether in terms of recruitment, training, or modernisation of dedicated information systems.

In 2016, each of the Group's business divisions developed a multiannual roadmap in collaboration with the programme team. They cover all the aspects of a compliance risk management programme, from updating the risk assessment to strengthening controls and reviewing key aspects (KYC, embargoes and sanctions, AML, customer protection, market abuse, etc.), updating the normative framework, and training and communication initiatives. Approved by the Group Executive Committee, their work is monitored on a quarterly basis at each Compliance Committee meeting at Group Executive Committee (COMCO) level.

Work dedicated to a target operating model for the Compliance function (target organisation, macro-processes, improved data quality, industrialisation of tasks through innovation, etc.) was also started. It is based on best practices, new organisational models implemented by other banks, and the most recent data processing developments.

This programme includes a component specific to business operations in the United States, which are subject to specific monitoring by the Group Executive Committee and Board of Directors. In its yearly assessment report, the Federal Reserve Bank stressed the progress already made, while calling for continued remediation efforts to finalise the initiatives undertaken and ensure their sustainability. The close monitoring of this Programme will continue in 2017 with the support of three lines of defense (core business, compliance function, internal audit).

 Lastly, it should be noted that the programme's participation in the implementation of new regulations is helping to accelerate this transformation

## Looking ahead to 2017

The Group Compliance system will continue to be strengthened in 2017 as part of the three-year action plans prepared for each core business.

In addition to its regulatory and operational efficiency targets, the Compliance function's transformation programme aims to take into consideration all developments in the Group, and to use new technologies.

As part of continuing the development of the Group Compliance function, started several years ago with the main goals of strengthening its governance and the internal control system, 2017 will be a decisive year with two major strategic projects:

- the "Culture and Conduct" programme, supervised directly by the General Management, the rules and principles of which go beyond regulatory requirements and aim in particular to develop training and awareness-raising initiatives for employees and management (see Chapter 5.2 Culture and Conduct);
- the study and implementation of the direct link between the Compliance Department and a Deputy Chief Executive Officer of the Group, as a full-function Division, just like the Risk Division and the Inspection and Group Audit.

# **10.2 RISKS AND LITIGATION**

The information pertaining to risks and litigation is included in Note 9 to the consolidated financial statements, page 423. of Registration Document.

# IN BRIEF

This section describes equity risks and other risks not described in previous chapters.

# 11. OTHER RISKS

# **11.1 EQUITY RISKS**

## Investment strategies and purpose

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 Executive Committee. 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 under available-for-sale financial assets insofar as these equity investments may be held for an indefinite period or may be sold at any time.

Societe Generale Group's exposure to equity investments that are not part of the trading book is equal to their book value net of impairments.

The following table presents these exposures at end-December 2016 and 2015, 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 92 : BANKING BOOK EQUITY INVESTMENTS AND HOLDINGS

(in EUR m)	31.12.2016	31.12.2015
Banking book equity investments and holdings – Accounting scope	14,657	14,720
o.w. equities and other equity instruments (AFS)	12,447	12,091
o.w. AFS securities held over the long term	2,210	2,629
Banking book equity investments and holdings - Prudential scope (EAD)	6,746	7,081
o.w. listed shares	188	717
o.w. unlisted shares	6,558	6,364

- Changes in fair value are recognised in Group shareholders' equity under "Unrealised or deferred capital gains and losses". In the event of a sale or durable impairment, changes in the fair value of these assets are recorded in the income statement under "Net gains and losses on available-for-sale financial assets". Dividends received on equity investments are recognised in the income statement under "Dividend income".
- For listed shares, the fair value is estimated based on the closing share price. For unlisted shares, the fair value is

estimated based on the category of financial instrument and one of the following methods:

- the share of net assets owned;
- the valuation based on recent transactions involving the company's shares (acquisition of shares by third parties, expert valuations, etc.);
- the valuation based on recent transactions involving companies in the same sector (earnings or NAV multiples, etc.).

#### TABLE 93 : NET GAINS AND LOSSES ON BANKING BOOK EQUITIES AND HOLDINGS

(in EUR m)	31.12.2016	31.12.2015
Gains and losses on the sale of shares	752	374
Impairment of assets in the equity portfolio	(36)	(28)
In proportion to the net income on the equities portfolio	56	56
Net gains/losses on banking book equities and holdings	772	402
Unrealised gains/losses on holdings	546	1,058
Of wich share included in Tier 1 and Tier 2 capital	546	1,057

# **Provisioning policy**

The impairment of available-for-sale financial assets is described in Note 3.8 to the financial statements in Chapter 6 of this Registration Document (p. 359 and following).

# **Regulatory capital requirements**

To calculate the risk-weighted assets under Basel 3, the Group applies the simple risk weighting method for the majority of its nontrading 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 the holdings in our insurance subsidiaries, a coefficient of 370%. Note that private equity shares acquired before January 2008 can be weighted at 150%. Furthermore, if they are not deducted from equity capital, material investments in the capital of finance companies are assigned a weighting coefficient of 250%.

At 31<sup>st</sup> December 2016, the Group's risk-weighted assets related to its non-trading equity portfolio, and its capital requirements, were as follows:

(in EUR m)			31.12.2016			31.12.2015		
Equities & holdings	Approach	Weighting	Exposure at default	Risk- weighted assets	Capital requirements	Exposure at default	Risk- weighted assets	Capital requirements
Private equity	Standard	150%	8	12	1	114	171	14
Private equity	Simple	190%	233	442	35	121	229	18
Financial securities	Simple	250%	963	2,406	192	807	2,016	161
Listed shares	Simple	290%	68	199	16	283	821	66
Unlisted shares and	Simple	370%	4,499	16,647	1,332	4,706	17,412	1,393
Total			5,771	19,706	1,576	6,030	20,650	1,652

#### TABLE 94 : CAPITAL REQUIREMENTS RELATED TO BANKING BOOK EQUITIES AND HOLDINGS (1)

(1) Excluding cash investments

# **11.2 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 by the Executive Committee under the authority of General Management, with the assistance of the Group Management Committee. The Executive Committee meets once a week, barring exceptions. The makeup of these various bodies is laid out in the Corporate Governance chapter of this Registration Document (p. 68 and following). The Internal Rules of the Board of Directors (provided in Chapter 7 of this Registration Document, p. 511) lay down the procedures for convening meetings.

# **11.3 ACTIVITY RISK**

Activity risk is the risk of loss if expenses incurred are higher than revenues generated. It is managed by the Finance Division through monthly revenue committee meetings.During these meetings, which are chaired by a member of General Management, the Group's business lines present their results

and comment on the state of business, and also present an analysis of their consumption of their budget and scarce resources (especially capital and liquidity).

# **11.4 RISKS RELATING TO INSURANCE ACTIVITIES**

Through its insurance subsidiaries, the Group is also exposed to a variety of risks inherent to this business. These include ALM risk management (risks related to interest rates, valuations, counterparties and exchange rates) as well as premium pricing risk, mortality risk and structural risk related to life and non-life insurance activities, including pandemics, accidents and catastrophes (such as earthquakes, hurricanes, industrial disasters, terrorist attacks or military conflicts).

The monitoring structure pertaining to these risks and the related issues are described in Note 4.3 to the consolidated financial statements and in Chapter 6 of this Registration Document (p. 376).

# **11.5 ENVIRONMENTAL AND SOCIAL RISKS**

The Group's approach in terms of environmental and social issues is set out in Chapter 5 of this Registration Document,

(p. 241 and following); in particular, information on risks related to climate change can be found on page 258.

# 12.1. PILLAR 3 CROSS REFERENCE TABLE

CRD1/CRR article	Theme	Risk and Pillar 3 report reference (except reference to the Registration Document)	Page in Pillar 3 report	Page in the Registration Document
90 (CRD4)	Return on assets	3.2 Scope of application - regulatory scope	. 34	
435 (CRR)	1. Risk management objectives and policies	3.1 Corporate governance structure and main bodies		68
		2 Governance and risk management organisation	5	
436 (a)(b) (CRR)	2. Scope of application	3 Capital management and adequacy Tables 1 and 2	00	
· · ·		+ Note 8.4 to the consolidated financial statement	- 29 ·	406
436 (c)(d)(e) (CRR)	2. Scope of application	Information not published for confidentiality reasons		
437 (CRR)	3. Own funds	3 Capital management and adequacy (and SG website - Capital instruments)	29	
438 (CRR)	4. Capital requirements	3 Capital management and adequacy	40	
439 (CRR)	5. Exposure to counterparty credit risk	4 Credit risks	55	
440 (CRR)	6. Capital buffers	3 Capital management and adequacy	29	
441 (CRR)	<ol> <li>Indicators of global systemic importance</li> </ol>	SG website - Information and publication section		
442 (CRR)	8. Credit risk adjustments	4 Credit risks	55	
443 (CRR)	9. Unencumbered assets	9 Liquidity risk	170	
444 (CRR)	10. Use of ECAls	5 Securitisation	132	
445 (CRR)	11. Exposure to market risk	6 Market risks	137	
446 (CRR)	12. Operational risk	7 Operational risks	151	
447 (CRR)	13. Exposures in equities not included in the trading book	11 Equity risk	191	
448 (CRR)	14. Exposure to interest rate risk on positions not included in the trading book	8 Structural interest rate and exchange rate risks	161	
449 (CRR)	15. Exposure to securitisation positions	5 Securitisation	123	
450 (CRR)	16. Remuneration policy	First update of the Registration Document (planned)		
451 (CRR)	17. Leverage	3 Capital management and adequacy	43	
452 (CRR)	18. Use of the IRB Approach to credit risk	4 Credit risks	64	
453 (CRR)	19. Use of credit risk mitigation techniques	4 Credit risks	60	
454 (CRR)	20. Use of the Advanced Measurement Approaches to operational risk	7 Operational risks	151	
	•	6 Market risks	137	

# 12.2. PILLAR 3 CROSS REFERENCE TABLE WITH THE RECOMMANDATIONS MADE BY THE ENHANCED DISCLOSURE TASK FORCE – EDTF

o.	Recommendation	Details	Page in Pillar 3 report	Page in the Registration Document
1	Present all related risk information together in any	Chapter 1 (description of the Group, strategy, presentation of the businesses)	Toport	9 and following
	particular report	Chapter 2 (management report, balance sheet structure, recent		
		developments and outlook) Report of risks, capital adequacy, Pillar 3)	5 and	25 and following
		report of fisks, capital adequacy, fillial of	following	IOIIOWIIIg
2	Definition of the principal	Availability of a glossary of the principal terms used	203	
	terms and metrics used	Definitions as necessary in the chapters concerned - credit risks	55	
		- market risks	137	
		- operational risks	151	
		General concepts of IFRS 9	62	
3	Definition and classification	Key figures	2-3	
	of risks and risk outlook	Types of risks	6	
		Risk factors	20	13
		Recent developments and outlook		
		Description of impairments in IFRS 9	62	
4	Definition of regulatory	Fully-loaded Basel 3 capital ratio	38	
	changes and new key ratios	Phase-in stages Additional GSIB buffer	38 29	
		Leverage ratio	43	
		LCR	172	
		NSFR	172	
5	Risk governance	Group governance principles (summary diagram)		68
		Chairman's report on corporate governance		81
		Chairman's report on internal control and risk management		132
		Risk management principles (summary diagram)	F 07	144-148
		Credit risks	5-27	
		Market risks Operational risks	5 55	
		Implementation strategy of IFRS 9	137	
			151	
6	Risk culture	Organisation and governance of the risk management system "Enterprise Risk Management" programme	5 12	
7	Key figures for the	Key Group figures		9
'	businesses.	Description of the businesses		15
	risk appetite,	Key risk figures	7	
	risk management	Risk appetite	7	
		Governance of risk management	5-19	
8	Stress test system	General description	7-9	
		Credit stress tests	56	
		Market risk stress tests	142	
9	Capital requirements	Capital requirements by type of risks Additional GSIB buffers	40 29	
10	Information on the		29	
10	Information on the composition	Composition of regulatory capital Details of regulatory capital	38 47	
	of regulatory capital	Reconciliation of the accounting balance sheet	31	
	Reconciliation of accounting	and the regulatory balance sheet	01	
	and regulatory data	Reconciliation of accounting capital and regulatory capital	38	
11	Changes in regulatory	Capital reconciliation chart		59
	capital	Regulatory capital flow statement	39	
	·	Qualitative comment	42	
12	Regulatory capital targets	Information on ratio targets and constraints (CET 1)		13
		Regulatory information	29,38	
40	Distribution of risk-weighted	Additional information in the analyses by risk type (credit, market,	40	

			Page in Pillar 3	Page in the Registration
No.	Recommendation	Details	report	Document
14	Table of RWA by	Group risk-weighted assets	40	
	calculation method	Credit risks	77	
		Market risks	146	
		Operational risks	159	
15	Table of credit risks by Basel portfolio	Details provided in the Credit Risk section of Chapter 4	55 and foll.	
16	Analysis of movements	Credit risk table (summary)	40	
	in RWA and capital	Market risk table (summary)	40	
	requirements	Market risk table (VAR by risk type and changes in capital	140	
		requirements)	146-149	
17	Backtesting	Credit risks	67,70	
	g	Market risks	139	
18	Liquidity reserve	Qualitative and quantitative comment	172	
10		Liquidity reserve (amount and composition)	172	
19	Encumbered eccete	Encumbered assets	172	
19	Encumbered assets			
		Market financing (schedule of securitised issues)	170	
20	Balance sheet by	Liabilities and off-balance sheet: Note 30 to the consolidated		372-37
	contractual maturities	financial statements		
		Balance sheet	174-177	
21	Refinancing strategy	Group's debt position, debt policy		6
		Refinancing strategy	169	
22	Reconciliation of risk-	Information not communicated		
	weighted assets and			
	accounting items for			
	exposures sensitive to			
	market risks			
23	Structural risk factors	Structural interest rate and exchange rate risks section	161	
20	(sensitivity of structural	Note 23 to the consolidated financial statements (employee	101	38
	positions to market	benefits)	139-142	00
	factors)	VAR analysis	109-142	
04			107	
24	Market risk modelling	Organisation and governance	137	
	principles	Methods for measuring market risk and defining limits	139	
		Governance	145	
25	Market risk	Methods for measuring market risk and defining limits	139	
	measurement methods	VAR and control of VAR	139-142	
		Stress tests, scenarios and results	142-145	
26	Loan portfolio	Key figures	44	
	structure	Portfolio structure	72 and foll.	
		Quantitative data	72 and foll.	
27	Impairment policy	Note 1 to the consolidated financial statements		30
	Loan provisions and	Credit policy	45-47	
	impairment	Quantitative data	63-66 ; 83-	
			85	
28	Movements in	Consolidated financial statements, Note 3.8		35
20		Doubtful loans coverage ratio	80	00
	provisions and	Doublin Indias Coverage ratio	80	
00	impairment		444 2000	
29		By exposure category and geographic region	111 and fol.	007 0
	market transactions	Note 3.2 "Financial derivatives" to the consolidated financial		337-34
		statements		
		Exposures on central counterparties (CCP)	119	
		Exposure on derivative financial instruments (notional)	120	

No.	Recommendation	Détails	Page in Pillar 3 report	Page in the Registration Document
30	Information relating to collateral and measures to reduce counterparty risk	Hedging of credit risk: guarantees and collateral, credit derivatives, risk mitigation measures, credit insurance	60	
31	Other risks	Description: types of risks	6	
		Management (summary)	5	
		Operational risks	151	
		Structural interest rate and exchange rate risks	161	
		Compliance, reputational and legal risks	179	
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		Business risks	193	
		Risks related to insurance activities	193	
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32	Analysis of losses related to	Quantitative	156	
	operational risk, including litigation and compliance	Risks and litigation	184	

# **12.3. INDEX OF THE TABLES IN THE RISK REPORT**

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3	2	2	Reconciliation of the consolidated balance sheet and the accounting balance sheet	31	171	
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# 12.4. CROSS REFERENCE TABLE APPLICABLE TO THE MAIN EXTERNAL CREDIT ASSESSMENT INSTITUTIONS - EXCERPT

# STANDARD APPROACH: CROSS REFERENCE TABLE BETWEEN ECAI RATINGS AND CRR CREDIT QUALITY SCALES

Credit quality scale	1	2	3	4	5	6
	Banque d	e France				
Global long-term issuer credit ratings scale	3++	3+, 3	4+	4, 5+	5, 6	7, 8, 9, P
	DBRS Ratin	gs Limited				
Long-term obligations rating scale	AAA, AA	А	BBB	BB	В	CCC, CC, C, D
Commercial paper and short-term debt rating scale	R-1 H, R- 1 M	R-1 L	R-2, R-3	R-4, R- 5, D		
Ability of settlement of claims rating scale	IC-1	IC-2	IC-3	IC-4	IC-5	D
	Fitch R	atings				
Long-term issuer credit ratings scale	AAA, AA	А	BBB	BB	В	CCC, CC, C, RD, D
Corporate finance obligations- Long-term ratings scale	AAA AA	А	BBB	BB	В	CCC, CC, C
Long-term international IFS ratings scale	AAA, AA	А	BBB	BB	В	CCC, CC, C
Short-term rating scale	F1+	F1	F2, F3	B, C, RD, D		
Short-term IFS ratings scale	F1+	F1	F2, F3	B, C		
	Moody's Invest	stors Service				
Global long-term ratings scale	Aaa, Aa	А	Baa	Ba	В	Caa, Ca, C
Obligations rating scale	Aaa-bf, Aa-bf	A-bf	Baa-bf	Ba-bf	B-bf	Caa-bf, Ca- bf, C-bf
Global short-term rating scale	P-1	P-2	P-3	NP		
Sta	andard & Poor's	Ratings Serv	vices			
Long-term issuer credit ratings scale	AAA, AA	А	BBB	BB	В	CCC, CC, R, SD/D
Long-term issues ratings scale	AAA, AA	А	BBB	BB	В	CCC, CC, C, D
Insurer financial strength ratings scale	AAA, AA	А	BBB	BB	В	CCC, CC, SD/D, R
Fund Credit quality ratings scale	AAAf, AAf	Af	BBBf	BBf	Bf	CCCf
Mid_market evaluation ratings scale		MM1	MM2	MM3, MM4	MM5, MM6	MM7, MM8, MMD
Short-term issuer credit ratings scale	A-1+	A-1	A-2, A-3	B, C, R, SD/D		
Short-term issue credit ratings scale	A-1+	A-1	A-2, A-3	B, C, D		

# SECURITISATION: CROSS REFERENCE TABLE BETWEEN THE RATINGS AND CREDIT QUALITY SCALES OF THE CRR IN STANDARD APPROACH.

Credit quality scale	1	2	3	4	All others			
DBRS Ratings Limited								
Long-term obligations rating scale	AAA (sf) to AA (low) (sf)	A (high) (sf) to A (low) (sf)	BBB (high) (sf) à BBB (low) (sf)	BB (high) (sf) to BB (low) (sf)	Lower than BB (low) (sf)			
Commercial paper and short-term debt rating scale	R-1 (high) (sf) to R-1 (low) (sf)	R-2 (high) (sf) to R-2 (low) (sf)	R-3 (sf)		Lower than R-3 (sf)			
Fitch Ratings								
Long-term issuer credit ratings scale	AAAsf to AA-sf	A+sf to A-sf	BBB+sf to BBB-sf	BB+sf to BB- sf	Lower than BB-sf			
Short-term rating scale	F1+sf, F1sf	F2sf	F3sf		Lower than F3sf			
Moody's Investors Service								
Global long-term rating scale	Aaa(sf) to Aa3(sf)	A1(sf) to A3(sf)	Baa1(sf) to Baa3(sf)	Ba1(sf) to Ba3(sf)	Lower than BA3(sf)			
Global short-term rating scale	P-1(sf)	P-2(sf)	P-3(sf)		NP(sf)			
Standard & Poor's Ratings Services								
Long-term issuer credit ratings scale	AAA (sf) to AA- (sf)	A+ (sf) to A- (sf)	BBB+ (sf) to BBB- (sf)	BB+ (sf)toBB- (sf)	Lower than BB- (sf)			
Short-term issuer credit ratings scale	A-1+ (sf), A-1 (sf)	A-2 (sf)	A-3 (sf)		Lower than A-3 (sf)			

scale     I													
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Credit quality scale	1	2	3	4		-	-	8	9	10	11	All others
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						DBR	S Ratings L	_imited					
$ \begin{array}{c} \begin{array}{c} \mbox{Lower} \mbox{Lower} \mbox{than BF-3} \mbox{(sf) to BP-3} (sf)$	obligations		(high) (sf) to AA (low)	(high)	A (sf)	(low)	(high)		(low)	(high)	BB (sf)	(low)	than BB
Long-term issuer credit ratings scale       AAAsf to AA- sf       A+sf Asf       A-sf       BBB+sf       BBBsf       BB-sf       Lower than BB-sf         Short-term rating scale       F1+sf, F1sf       F2sf       F3sf       Lower than Bsf         Global long- term rating scale       Aaa(sf) to Aaa(sf)       A1(sf) to Aa3(sf)       A2(sf) A3(sf)       Baa1(sf) Baa2(sf)       Baa3(sf) Baa3(sf)       Baa3(sf)       Baa3(sf)         Global short- term rating scale       P-1(sf)       P-2(sf)       P- 3(sf)       P- 3(sf)       P- 3(sf)       NP(sf)         Short-term issuer credit ratings scale       AAA (sf)       AA+ (sf)       A (sf)       A- (sf)       BBB+ (sf)       BBB- (sf)       BB (sf)       BB- (sf)       Cover than BB- (sf)         Short-term issuer credit (sf), A-       A-2 (sf)       A- (sf)       A (sf)       A- (sf)       BBB+ (sf)       BBB- (sf)       BB (sf)       BB- (sf)       Cover than BB- (sf)	paper and short-term debt rating	(high) (sf) to R-1 (low)	(high) (sf) to R-2 (low)										than R-3
Issuer credit ratings scaleAAAsf to AA- sfto AA- sfA+sf Asf AsfA-sf BBB+sfBBBsf BBBsfBB-sf BB-sfBB-sf BB-sfLower than BB-sShort-term rating scaleF1+sf, F1sfF2sf to Aaa(sf)F3sfLower than BsfGlobal long- term rating scaleAaa(sf) to Aaa(sf)A1(sf) to Aa3(sf)A1(sf) A2(sf)A2(sf) A3(sf)Baa1(sf) Baa1(sf)Baa2(sf) Baa3(sf)Baa1(sf) Baa2(sf)Baa2(sf) Baa3(sf)Baa2(sf) Baa3(sf)Baa1(sf) Baa2(sf)Baa2(sf) Baa3(sf)Baa2(sf) Baa3(sf)Baa1(sf) Baa2(sf)Baa2(sf) Baa3(sf)Baa2(sf) Baa3(sf)Baa1(sf) Baa2(sf)Baa2(sf) Baa3(sf)Baa2(sf) Baa3(sf)Baa1(sf) Baa2(sf)Baa2(sf) Baa3(sf) <td colspan="8">Fitch Ratings</td> <td></td>	Fitch Ratings												
rating scale       F1sf       F2st       F3st       than Bsf         Moody's Investors Service       Moody's Investors Service       Lower         Global long- term rating scale       Aaa(sf)       Aa1(sf)       A2(sf)       A3(sf)       Baa1(sf)       Baa2(sf)       Ba1(sf)       Ba2(sf)       Ba3(sf)       Lower than Ba3(sf)         Global short- term rating scale       P-1(sf)       P-2(sf)       P- 3(sf)       P- 3(sf)       P- 3(sf)       NP(sf)         Long-term issuer credit ratings scale       AAA (sf)       A+ (sf) à AA- (sf)       A (sf)       A- (sf)       BBB+ (sf)       BBB- (sf)       BB+ (sf)       BB (sf)       BB- (sf)       Lower than BB- (sf)         Short-term issuer credit       A-1+ (sf), A-       A-2 (sf)       A-3 (sf)       A-3 (sf)       BBB+ (sf)       BBB+ (sf)       BBB- (sf)       BB (sf)       BB- (sf)       Lower than A-3	issuer credit	AAAsf	to AA-	A+sf	Asf	A-sf	BBB+sf	BBBsf	BBB-sf	BB+sf	BBsf	BB-sf	Lower than BB-sf
Global long- term rating scale       Aa1(sf) Aa3(sf)       A1(sf) to Aa3(sf)       A2(sf) A2(sf)       Baa1(sf) Baa1(sf)       Baa2(sf) Baa3(sf)       Baa1(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa2(sf) Baa3(sf)       Baa3(sf)       B			F2sf	F3sf									
term rating scaleAaa(sf) Aa3(sf)to A1(sf)A1(sf) A2(sf)A3(sf) Baa1(sf)Baa2(sf) Baa3(sf)Ba1(sf) Ba2(sf)Ba3(sf) Ba3(sf)Ba3(sf) Ba3(sf)Global short- term rating scaleP-1(sf) P-2(sf)P-2(sf) 3(sf)P- 3(sf)P- 3(sf)NP(sf)Long-term issuer credit ratings scaleAAA (sf)AA+ (sf) à AA- (sf)A+ (sf)A- (sf) (sf)BBB+ (sf)BBB (sf)BBB- (sf)BB+ (sf)BB- (sf)BB- (sf)Lower than BB- (sf)Short-term issuer credit (sf), A- (sf), A- (sf), A-A-2 (sf) (sf)A-3 (sf)A-3 (sf)A-3 (sf)A-3 (sf)Lower than A-3						Moody	's Investors	s Service					
term rating scaleP-1(sf)P-2(sf) $P_{-3}(sf)$ NP(sf)NP(sf)Standard & Poor's Ratings ServicesLong-term issuer credit ratings scaleAAA (sf)AA+ (sf) à AA- (sf)A+ (sf)A (sf)A- (sf)BBB+ (sf)BBB- (sf)BB+ (sf)BB (sf)BB+ (sf)BB (sf)BB- (sf)Cover than BB- (sf)Short-term issuer credit (sf), A- (sf), A- (sf), A-A-2 (sf)A-3 	term rating	Aaa(sf)	to	A1(sf)	A2(sf)	A3(sf)	Baa1(sf)	Baa2(sf)	Baa3(sf)	Ba1(sf)	Ba2(sf)	Ba3(sf)	than
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	term rating	P-1(sf)	P-2(sf)										NP(sf)
issuer credit ratings scale       AAA (sf) A       (sf) a (sf)       A+ (sf)       A (sf) A- (sf)       BBB+ (sf)       BBB- (sf)       BB+ (sf)       BB- (sf)       BB- (sf)       than BB- (sf)         Short-term issuer credit       A-1+ (sf), A-       A-3 (cf)       A-3 (cf)       Lower than A-3	Standard & Poor's Ratings Services												
issuer credit (sf), A- A-2 (sf) A-3 (sf) than A-3	issuer credit		(sf) à		A (sf)	A- (sf)					BB (sf)		than BB-
	issuer credit	(sf), A-	A-2 (sf)										than A-3

# SECURITISATION: CROSS REFERENCE TABLE BETWEEN THE RATINGS AND CREDIT QUALITY SCALE OF THE CRR IN INTERNAL RATINGS APPROACH.

# **12.5. MAPPING FOR EXPOSURE CLASSES**

In the presentation of the credit risk data, the table below shows the link between the synthetic presentations of certain tables with the exposure classes detailed in the tables requested by EBA in the context of the revision of Pillar 3, starting on page 84.

Method	Corep exposure category	Pillar 3 exposure class
IRBA	Central governments and central banks	Sovereign
IRBA	Institutions	Institutions
IRBA	Corporate - SME	Corporates
IRBA	Corporate - Specialised lending	Corporates
IRBA	Corporate - Other	Corporates
IRBA	Retail - Secured by real estate SME	Retail
IRBA	Retail - Secured by real estate non-SME	Retail
IRBA	Retail - Qualifying revolving	Retail
IRBA	Retail - Other SME	Retail
IRBA	Retail - Other non - SME	Retail
IRBA	Other non credit-obligation assets	Others
IRBA	Default funds contributions	Others
IRBF	Central governments and central banks	Sovereign
IRBF	Institutions	Institutions
IRBF	Corporate - SME	Corporates
IRBF	Corporate - Specialised lending	Corporates
IRBF	Corporate - Other	Corporates
IRB	Institutions	Others
IRB	Securitisation	Others
Standard	Central governments or central banks	Sovereign
Standard	Regional governments or local authorities	Corporates
Standard	Public sector entities	Corporates
Standard	Multilateral developments banks	Corporates
Standard	International organisations	Sovereign
Standard	Institutions	Institutions
Standard	Corporates	Corporates
Standard	Retail	Retail
Standard	Secured by mortgages on immovable property	Others
Standard	Exposures in default	Others
Standard	Items associated with particularly high risk	Others
Standard	Covered bonds	Others
Standard	Claims on institutions and corporate with a short-term credit assessment	Others
Standard	Claims in the form of CIU	Others
Standard	Equity Exposures	Others
Standard	Other items	Others
Standard	Default funds contributions	Others
Standard	Securitisation	Others

# 12.6. GLOSSARY

# ACRONYM TABLE

AcroNYM	Definition	Glossary
ABS	Asset-Backed Securities	See: Securitisation
CCF	Credit Conversion Factor	CCF
CDS	Credit Default Swap	See: Securitisation
CDO	Collaterallised Debt Obligation	See: Securitisation
CLO	Collateralised Loan Obligation	See: Securitisation
CMBS	Commercial Mortgage Backed Securities	See: Securitisation
CRD	Capital Requirement Directive	CRR/CRD4
CRM (Risque de crédit)	Credit Risk Mitigation	Credit Risk Mitigation (CRM)
CRM (Risque de marché)	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
IRBA	Internal ratings-based approach - Advanced	IRBA
IRBF	Internal ratings-based approach - Foundation	IRBF
IRC	Incremental Risk Charge	IRC
GSIB	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	See: Securitisation
RW	Risk Weighted	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 1st 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: 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).

**Core Tier 1 ratio:** ratio between Core Tier 1 capital and risk-weighted assets, according to Basel 2 rules and their changes known as Basel 2.5.

**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 outstandings 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.

Credit Conversion Factor (CCF): the ratio of the currently undrawn amount of a commitment that could be drawn and that would therefore be outstanding at default to the currently undrawn amount of the commitment, the extent of the commitment being determined by the advised limit, unless the unadvised limit is higher;

Credit risk mitigation (CRM) : a technique used by an institution to reduce the credit risk associated with an exposure or exposures which that institution continues to hold;

Credit and counterparty risk: risk of losses arising from the inability of the Group's customers, issuers or other counterparties to meet their financial commitments. Credit risk also includes the counterparty risk linked to market transactions, as well as that stemming from securitisation activities.

**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 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.

**CRD3:** European Directive on capital requirements, incorporating the provisions known as Basel 2 and 2.5, notably in respect of market risk: improvement in the incorporation of the risk of default or rating migration for assets in the trading book (tranched and untranched assets), and reduction in the procyclicality of Value at Risk (see definition).

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, 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 in the form of contracts (forwards, options, swaps, etc.).

**Doubtful loan coverage rate:** ratio between portfolio provision and depreciation and doubtful outstandings (customer loans and receivables, loans and receivables with credit institutions, finance leases and basic leases).

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 by 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 outstandings: ratio between doubtful outstandings and gross book loan outstandings (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 risk:** beyond asset/liability risk management (interest-rate, valuation, counterparty and currency risk), these include underwriting risk, mortality risk and structural risk of life and non-life insurance activities, including pandemics, accidents and catastrophic events (such as earthquakes, hurricanes, industrial disasters, or acts of terrorism or war).

**Internal Model Method (IMM)**: Internal method used to determine exposure to counterparty risk. The banking models used are subject to validation by the regulator. The application of these internal models has an impact on the method of calculating the EAD of market transactions but also on the method of calculating the Baloise 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.

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.

Internal Rating Based-Advanded (IRBA): banks are allowed to use their own estimated risk parameters for the purpose of calculatingregulatory capital.

Internal Rating Based-Foundation (IRBF): banks are allowed to use their own estimated risk parameters for the purpose of calculating regulatory capital.

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).

Market risk: risk of impairment of financial instruments arising from changing market parameters, as well as their volatility and the correlations between them. In particular, these parameters are foreign exchange rates, interest rates, as well as the prices of securities (equities and bonds), commodities, derivatives and all other assets, such as real estate assets.

Market stress tests: to assess market risks, 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 scenarii 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.

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 net exposure of specific and general provisions in internal method and net specific provisions in the standard 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 risks** (including accounting and environmental risks): risk of losses or sanctions, notably due to failures in procedures and internal systems, human error or external events, etc.

**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 themselves guarantor for an obligation binds themselves to the creditor to honour that obligation, if the debtor does not honour it themselves. 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, including 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).

**Resecuritisation:** 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 are 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 outstandings) to an organisation that issues, for this purpose, tradable securities to which investors subscribe. This transaction may involve a transfer of outstandings (physical securitisation) or a transfer of risk only (credit derivatives). Securitisation transactions may, if applicable, enable securities subordination (tranches).

#### The following products are considered 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 payment 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;
- 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.
- RMBS: Residential Mortgage Backed Securities, a debt security backed by an asset portfolio of residential mortgage loans.

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 systematically important institutions Globally Systemically Important Financial Institutions (G-SIFI). These banks meet criteria defined in the Basel Committee rules included in the document titled "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 currency risk: risk of loss or of writedowns in the Group's assets arising from variations in interest or exchange rates. Structural interest rate and exchange rate risks are incurred in commercial activities and proprietary transactions.

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 asset (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.

**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 excluded from 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.