RISK REPORT

2022 - PILLAR III

PARIS 2024

GROUPE BPCE

PARTENAIRE PREMIUM

PARIS 2024

Contents

RISK REPORT

2022 - PILLAR III

The purpose of Pillar III is to establish market discipline through a series of reporting requirements. These requirements – both qualitative and quantitative – are intended to improve financial transparency in the assessment of risk exposure, risk assessment procedures and capital adequacy.

Pillar III therefore enhances minimum capital requirements (Pillar I) and the prudential supervision process (Pillar II).

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Foreword

The Pillar III report presents information relating to the risks of Groupe BPCE and is prepared in accordance with European regulation 2019/876, known as "CRR II", in particular according to articles 431 to 455 of the regulation, which detail the information to be published by institutions under Pillar III. The CRR II-CRD V legislative package was adopted on May 20, 2019 by the European Parliament and entered into force on June 28, 2021. Pillar III disclosures have also been prepared in accordance with the European Commission's Implementing Regulation (EU) 2021/637 of March 15, 2021.

The format and references of the Pillar III tables changed on June 30, 2021 according to the technical standards defined by Implementing Regulation (EU) No. 2021/637.

The data expected under Pillar III ESG is published here for the first time.

CONTROL FRAMEWORK

Groupe BPCE has put an internal control framework in place to verify that the reported information is appropriate and compliant.

Structure of the Pillar III report

The Pillar III report is divided into 16 sections:

- Section 1 presents the key figures, the type of risks and the regulatory context;
- Section 2 is dedicated to risk factors;
- Section 3 explains the overall organization of Groupe BPCE's internal control system;
- Section 4 is dedicated to capital management and capital adequacy;
- Sections 5 to 14 provide detailed information on the main risks: description of the principles of organization and risk management, presentation of a summary of essential information and in a dedicated section detailed quantitative information;
- Section 15 relates to information on the remuneration policy;
- Section 16 details the group's internal control policy.

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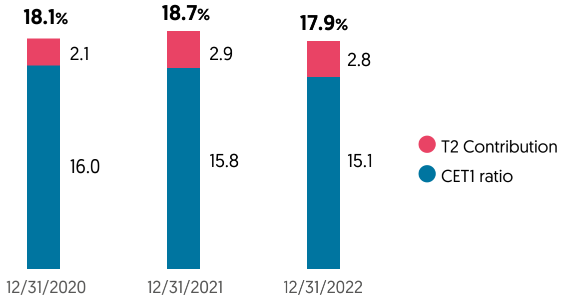
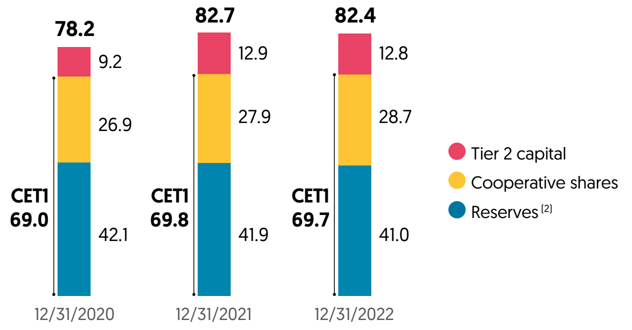
KEY FIGURES

KEY INDICATORS

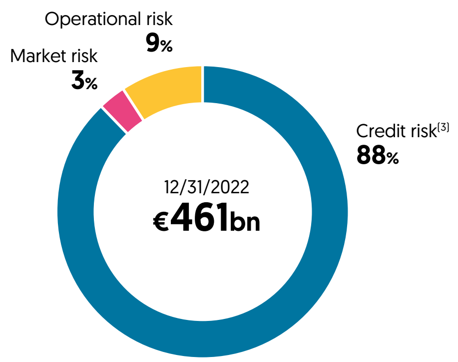
FULLY-LOADED CAPITAL RATIOS [1]
(as a %)



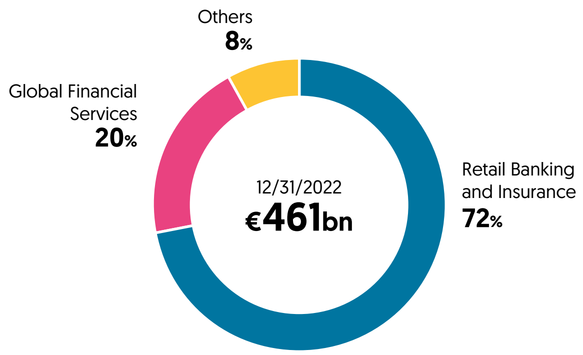
TOTAL FULLY LOADED CAPITAL [1]
(in billions of euros)



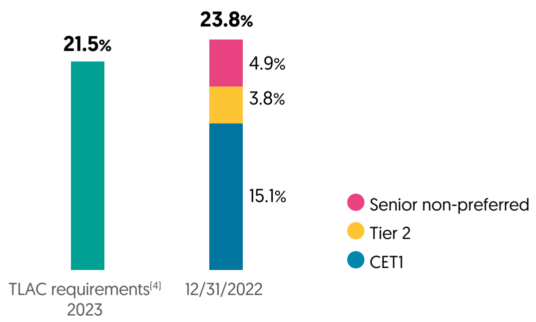
RISK-WEIGHTED ASSETS BY TYPE OF RISK



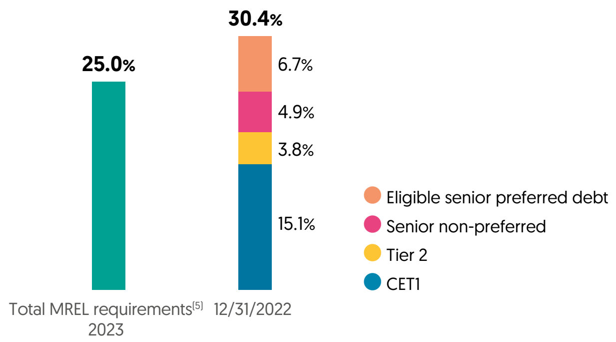
RISK-WEIGHTED ASSETS BY BUSINESS LINE



MREL RATIO *(as a % of RWAs)*



MREL RATIO *(as a % of RWAs)*



(1) CRR/CRD IV without transitional measures; additional Tier 1 capital takes into account subordinated issues that have become ineligible at the phase-out rate in force.
(2) Reserves net of prudential restatements.
(3) Including settlement-delivery risk.
(4) Based on the FSB TLAC term sheet dated November 9, 2015.
(5) Based on the ACPR notification of 03/22/2021.

ADDITIONAL INDICATORS

	12/31/2022	12/31/2021
Cost of risk (in basis points)[(1)]	24	23
Ratio of non-performing/gross outstanding loans	2.3%	2.4%
Impairment recognized/Gross outstandings	41.3%	42.7%
Groupe BPCE's consolidated VaR *(in millions of euros)*	10.3	8.3
Liquidity reserves *(in billions of euros)*	322	329

(1) Excluding exceptional items.

EU KM1 – KEY INDICATORS

	in millions of euros	a 12/31/2022	b 09/30/2022	c 06/30/2022	d 03/31/2022	e 12/31/2021
	AVAILABLE CAPITAL					
1	Common Equity Tier 1 (CET1)	69,665	69,453	68,557	68,181	69,764
2	Tier 1 capital	69,665	69,453	68,557	68,181	69,764
3	Total capital	82,424	83,212	82,322	83,061	82,715
	RISK-WEIGHTED ASSETS					
4	Total risk-weighted assets	460,858	460,514	459,214	448,000	441,428
	CAPITAL RATIOS (AS A PERCENTAGE OF RISK-WEIGHTED ASSETS)					
5	Common Equity Tier 1 ratio	15.12%	15.08%	14.93%	15.22%	15.80%
6	Equity Tier 1 ratio	15.12%	15.08%	14.93%	15.22%	15.80%
7	Total capital ratio	17.88%	18.07%	17.93%	18.54%	18.74%
	ADDITIONAL CAPITAL REQUIREMENTS TO ADDRESS RISKS OTHER THAN THE EXCESSIVE LEVERAGE RISK (AS A PERCENTAGE OF THE RISK-WEIGHTED ASSETS)					
EU 7a	Additional capital requirements to address risks other than excessive leverage risk	2.00%	2.00%	2.00%	2.00%	1.75%
EU 7b	of which: to be met with CET1 capital	1.13%	1.13%	1.50%	1.50%	1.31%
EU 7c	of which: to be met with Tier 1 capital	1.50%	1.50%	1.50%	1.50%	1.31%
EU 7d	Total SREP capital requirement	10.00%	10.00%	10.00%	10.00%	9.75%
	OVERALL BUFFER REQUIREMENT AND OVERALL CAPITAL REQUIREMENT (AS A PERCENTAGE OF THE RISK-WEIGHTED ASSETS)					
8	Capital conservation buffer	2.50%	2.50%	2.50%	2.50%	2.50%
EU 8a	Conservation buffer due to macro-prudential or systemic risk at the level of a Member State	0.00%	0.00%	0.00%	0.00%	0.00%
9	Institution-specific countercyclical capital buffer	0.03%	0.01%	0.02%	0.02%	0.02%
EU 9a	Systemic risk buffer	0.00%	0.00%	0.00%	0.00%	0.00%
10	Global systemically important institution buffer	1.00%	1.00%	1.00%	1.00%	1.00%
EU 10a	Other systemically important institution buffer	0.00%	0.00%	0.00%	0.00%	0.00%
11	Overall buffer requirement	3.53%	3.51%	3.52%	3.52%	3.52%
EU 11a	Overall capital requirements	13.53%	13.51%	13.52%	13.52%	13.27%
12	CET1 capital available after compliance with total SREP capital requirements	9.12%	9.08%	8.93%	9.22%	9.99%
	LEVERAGE RATIO					
13	Total exposure measure	1,388,681	1,408,372	1,355,218	1,242,971	1,212,857
14	Leverage ratio	5.02%	4.93%	5.06%	5.49%	5.75%
	ADDITIONAL CAPITAL REQUIREMENTS TO ADDRESS THE EXCESSIVE LEVERAGE RISK (AS A PERCENTAGE OF THE TOTAL EXPOSURE MEASURE)					
EU 14a	Additional capital requirements to address the excessive leverage risk	0.00%	0.00%	0.00%	0.00%	0.00%
EU 14b	of which: to be met with CET1 capital	0.00%	0.00%	0.00%	0.00%	0.00%
EU 14c	Total SREP leverage ratio requirement	3.00%	3.00%	3.00%	3.23%	3.23%
	LEVERAGE RATIO BUFFER REQUIREMENT AND OVERALL LEVERAGE RATIO REQUIREMENT (AS A PERCENTAGE OF TOTAL EXPOSURE MEASURE)					
EU 14d	Leverage ratio buffer requirement	-	-	-	-	-
EU 14e	Overall leverage ratio requirement	3.00%	3.00%	3.00%	3.23%	3.23%
	LIQUIDITY COVERAGE RATIO					
15	Total High Quality Liquid Assets (HQLA) (weighted average)	220,984	210,361	185,958	218,414	222,399
EU 16a	Cash outflows – Total weighted value	208,095	228,626	225,657	223,048	205,973
EU 16b	Cash inflows – Total weighted value	66,970	79,433	84,314	76,936	67,903
16	Total net cash outflows (adjusted value)	141,125	149,192	141,342	146,113	138,069
17	Liquidity coverage ratio	156.59%	141.00%	131.57%	149.48%	161.08%
	NET STABLE FUNDING REQUIREMENT					
18	Total available stable funding (ASF)	828,977	854,269	843,577	875,246	875,323
19	Total RSF	780,086	783,702	773,139	767,840	756,669
20	NSFR ratio	106.27%	109.00%	109.11%	113.99%	115.68%

1.1 Types of risk

Risk macro-categories	Definition
Credit and counterparty risks	The risk of loss resulting from the inability of clients, issuers or other counterparties to honor their financial commitments. It includes counterparty risk related to market transactions (replacement risk) and securitization activities. It can be exacerbated by concentration risk.
Financial risks	
• Market risk	The risk of loss of value on financial instruments resulting from changes in market inputs, from the volatility of these inputs or from the correlations between these inputs. Inputs include exchange rates, interest rates and prices of securities (equities, bonds), commodities, derivatives or any other assets, such as real estate assets.
• Liquidity risk	The risk that the Group cannot meet its cash requirements or collateral requirements when they fall due and at a reasonable cost.
• Structural interest rate risk	The risk of loss in interest income or in the value of a fixed-rate structural position in the event of changes in interest rates. Structural interest rate risks are associated with commercial activities and proprietary transactions.
• Credit spread risk	The risk associated with a decline in the creditworthiness of a specific issuer or a specific category of issuers.
• Exchange rate risk	The risk of loss in interest income or in the value of a fixed-rate structural position in the event of changes in exchange rates. Structural interest rate and foreign exchange risks are associated with commercial activities and proprietary transactions.
Non-financial risks	
• Non-compliance risk	The risk of a legal, administrative or disciplinary penalty, material financial loss or reputational risk arising from a failure to comply with the provisions specific to banking and financial activities (whether these are stipulated by directly applicable national or European laws or regulations), with professional or ethical standards, or instructions from executive management, notably issued in accordance with the policies of the supervisory body.
• Operational risk	The risk of loss resulting from inadequacies or malfunctions attributable to procedures, employees and internal systems (including in particular information systems) or external events, including events with a low probability of occurrence, but with a risk of high loss.
• Insurance underwriting risks	In addition to asset-liability risk management (interest rate, valuation, counterparty and foreign exchange risks), these risks include pricing risk in respect of mortality risk premiums and structural risks related to life and non-life insurance activities, including pandemics, accidents and disasters (earthquakes, hurricanes, industrial accidents, terrorist acts and military conflicts).
Strategic business and ecosystem risks	
• Solvency risk	The risk that the company will be unable to honor its long-term commitments and/or ensure the continuity of its ordinary operations in the future.
• Climate risk	Vulnerability of banking activities to climate change, where a distinction can be made between physical risk directly relating to climate change and transition risk associated with efforts to combat climate change.

1.2 Regulatory changes

Renewed European solidarity in the face of the Ukrainian crisis

The outbreak of war on the EU's doorstep, with its impact on energy access and accelerating inflation, has further refocused European and French regulatory work on consumer protection and economic sovereignty Europeans seem to be united on various subjects, which encourages the Commission and parliamentarians sustain their regulatory work.

Progress of the banking union

In a context of difficulties in the “real” economy, the co-legislators were particularly effective in taking charge of the CRR3/CRD6 banking package in 2022.

The Commission’s draft (October 2021) had already included a significant number of agreed measures between Member States. The Council, under the French Presidency, was able to find a compromise in six months of work. National interests were expressed on a number of political issues, such as the level at which prudential capital requirements are applied (individual or consolidated) to satisfy host countries (output floor mechanism), the introduction of a grandfather clause for "strategic" holdings for the benefit of German IPS, the flat-rate calculation of operational risk without taking into account historical losses for Spanish banks... In the European Parliament, the high degree of fragmentation of the parties has encouraged accelerated work due to the absence of a majority on most of the proposed amendments, including the environmentalists' demands to use the banks as a tool for greening the European economy. The compromise therefore remains close to the Commission's initial draft and the technical amendments to the Council's draft, except on governance issues specific to the European text: the treatment of third-country branches and the methods to assess the suitability of managers. Thus, the work of the Trilogue should also be concluded quickly in 2023.

With regard to the resolution framework, the Eurogroup in June 2022 validated a pragmatic approach and asked the Commission to refocus the reform project on a limited number of subjects (debt hierarchy, notion of public interest, etc.) in order to clarify the treatment applicable to medium-sized banks. Parliament regrets that the European guarantee fund project is not part of the scope of the review and asks for strong commitments. A legislative draft is expected in 2023.

A sustained regulatory agenda

The regulatory agenda remains strong for banks and BPCE: the digital euro initiative, revision of the consumer loans directive, revision of the directive on the distance marketing of financial services, as well as acceleration of the sustainable finance agenda, and finalizing the work on open finance.

On the digital euro, the committee is working on a text that will specify the legal basis, and which will be published at the end of May 2023.

The consumer loans directive is still under negotiation at the Trilogue, where discussions continue on the inclusion of GAFAMs (acronym for American technology companies), which make deferred/split payments for their goods and services, in the scope of the directive.

On the directive on the distance marketing of financial services, the provisions of the text must be repealed and incorporated into the Consumer Law Directive.

On sustainable finance, many texts have already been adopted and are in the implementation and technical development phase: EU taxonomy, CSRD (corporate sustainability disclosure regulation) which replaces NFRD and will integrate the standards of extra-financial reporting (EFRAG, SFDR - sustainable finance disclosure regulation - Deforestation), while other texts are being negotiated: CSDDD (Corporate sustainability due diligence directive) - corporate duty of vigilance in terms of sustainability, and EU green bond standards.

On open finance, the Commission’s work is progressing and the publication of the text is expected at the end of June.

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RISK FACTORS

The banking and financial environment in which Groupe BPCE operates exposes it to a multitude of risks and requires it to implement an increasingly demanding and rigorous policy to control and manage these risks (see Article 16 of Regulation (EU) No. 2017/1129 known as "Prospectus 3" of June 14, 2017, the provisions of which relating to risk factors entered into force on July 21, 2019).

Some of the risks to which Groupe BPCE is exposed are set out below. However, this is not a comprehensive list of all of the risks incurred by Groupe BPCE in the course of conducting its business or given the environment in which it operates. The risks presented below are those identified to date as significant and specific to Groupe BPCE, and liable to have a material adverse impact on its business, financial position and/or results. For each of the risk sub-classes listed below, the risk factor considered to date by Groupe BPCE as the most significant is listed first.

The risks presented below are those identified to date as liable to have an adverse impact on the businesses of BPCE SA group and BPCE SA.

Strategic, business and ecosystem risks

Groupe BPCE may be vulnerable to political, macro-economic and financial environments or to specific circumstances in its countries of operation.

Some Groupe BPCE entities are exposed to country risk, which is the risk that economic, financial, political or social conditions in a foreign country (particularly in countries where the Group conducts business) may affect their financial interests. Groupe BPCE predominantly does business in France (81% of net banking income for the fiscal year ended December 31, 2022) and North America (11% of net banking income for the fiscal year ended December 31, 2022), with other European countries and the rest of the world accounting for 4% and 4%, respectively, of net banking income for the fiscal year ended December 31, 2022. Note 12.6 "Locations by country" to the consolidated financial statements of Groupe BPCE, contained in the 2022 universal registration document, lists the entities established in each country and gives a breakdown of net banking income and income before tax by country of establishment.

A significant change in the political or macro-economic environment of such countries or regions may generate additional expenses or reduce profits earned by Groupe BPCE.

The extent of the imbalances to be eliminated (mismatch between supply and demand in the goods and labor markets, public and private debt, inflationary mechanics of expectations, heterogeneity of geographical and sectoral situations), combined with numerous overlapping global risks, can always tip developed economies into a downward spiral. To date, these joint threats mainly relate to: geopolitical and health uncertainties (risks on supplies and value chains, evolution of the Russian-Ukrainian military situation and sanctions against Russia, increased tension between Taiwan and China, availability of nuclear weapons in Iran, effective challenge to the zero-Covid policy in China); the development of protectionist trends, particularly in the United States (such as the Chips Act - $270 billion - and the Inflation Reduction Act (IRA) - $370 billion - enacted in August 2022, both of which massively subsidize the microprocessor industry and renewable energies); delays in the negative impacts of successive monetary tightening and reduced budget support; contract renegotiations, particularly for natural gas and electricity in the Euro zone. In addition, the development of the war in Ukraine, by its geographical proximity, maintains both uncertainty and fear and weariness in the face of the continuation of rapid repetitive crises, especially after the pandemic.

In addition to any serious economic disruption, such as current inflation and its impact on the economy, or such as the financial crisis of 2008 or the sovereign debt crisis in Europe in 2011 or a major geopolitical crisis, could have a significant negative impact on all Groupe BPCE activities, in particular if the disruption is characterized by a lack of market liquidity making it difficult for Groupe BPCE to obtain funding. In particular, some risks do not occur in the normal economic cycle because they are externally generated. Examples include the increase in credit risk associated with corporate debt around the world (leveraged loans market) and the threat of the Covid-19 epidemic growing even worse, or the longer-term impacts of climate change. During the financial crisis of 2008 and 2011, the financial markets were subject to strong volatility in response to various events, including but not limited to the decline in oil and commodity prices, the slowdown in emerging economies and turbulence on the equity markets, which directly or indirectly impacted several Groupe BPCE businesses (primarily securities transactions and financial services).

Similarly, the armed conflict triggered by the Russian Federation following its invasion of Ukraine constitutes a significant change that directly or indirectly penalizes the economic activity of the counterparties financed by Groupe BPCE, and entails additional expenses for or reduces the profits of Groupe BPCE, in particular by discontinuing its activities in this geographical area. For information, as of December 31, 2022, Ukrainian counterparties were impaired in the amount of €35 million, corresponding to a gross exposure of €91 million. The Russian counterparties were impaired in the amount of €85 million corresponding to a gross exposure of €1,088 million. These exposures are very limited in view of Groupe BPCE's €939 billion in gross outstanding loans and advances at amortized cost at December 31, 2022 (customers and banks).

For more detailed information, see Sections 4.2.1 "Economic and financial environment" and 4.7 "Outlook for Groupe BPCE" of the 2022 universal registration document.

The risk of a pandemic (such as the coronavirus - Covid-19) and its economic consequences may adversely impact the Group's operations, results and financial position.

The emergence of Covid-19 in late 2019 and rapid spread of the pandemic across the globe led to a deterioration in economic conditions in multiple business sectors, a deterioration in the financial position of economic players, while also disrupting the financial markets. In response, many affected countries were forced to implement preventive health measures (closed borders, lockdown measures, restrictions on certain economic activities, etc.). Government (guaranteed loans, tax and social assistance, etc.) and banking (moratoriums) schemes were put in place. Some counterparties may emerge weakened from this unprecedented period.

Massive fiscal and monetary policy measures to support activity were put in place between 2020 and 2022, notably by the French government (State-guaranteed loans for businesses and professional customers, for individual customers, short-time working measures as well as numerous other fiscal, social and bill-paying measures) and by the European Central Bank (more abundant and cheaper access to very large refinancing packages). Groupe BPCE has actively participated in the French State-guaranteed loan program in the interest of financially supporting its customers and helping them overcome the effects of this crisis on their activities and income (*e.g.* automatic six-month deferral on loans to certain professional customers and micro-enterprises/SMEs). There is no way to guarantee, however, that such measures will be enough to offset the negative impacts of the pandemic on the economy or to fully stabilize the financial markets over the long term. In particular, the repayment of State-guaranteed loans may lead to defaults on the part of borrowers and financial losses for Groupe BPCE up to the portion not guaranteed by the State.

Groupe BPCE may not achieve the objectives of its BPCE 2024 strategic plan.

On July 8, 2021, Groupe BPCE announced its BPCE 2024 strategic plan. It is structured around the following three strategic priorities: (i) a winning spirit, with €1.5 billion in additional revenues in five priority areas, (ii) customers, by offering them the highest quality service with an adapted relationship model, and (iii) the climate, through concrete and measurable commitments that are part of a Net zero trajectory. The BPCE 2024 strategic plan is based on the following three key principles: (i) be simple: because Groupe BPCE seeks efficiency and customer satisfaction, it aims for greater simplicity; (ii) be innovative: because Groupe BPCE is driven by an entrepreneurial spirit and is aware of the reality of the changes underway, it strengthens its capacity for innovation; and (iii) be safe, because Groupe BPCE is committed to a long-term approach, it prioritizes the security of its development model with regard to its ambitions. These strategic objectives were developed in the context of the Covid-19 crisis, which has acted as an indicator and accelerator of fundamental trends (in particular, digitization, hybrid work, energy transition) and reflects Groupe BPCE's desire to accelerate its development by supporting its customers in their economic recovery and their projects to emerge from the health crisis. The success of the BPCE 2024 strategic plan is based on a very large number of initiatives to be implemented within the various business lines of Groupe BPCE. Although many of these targets can be achieved, it is possible that not all of them will be, nor is it possible to predict which of these goals will not. The BPCE 2024 strategic plan also calls for significant investments, but if the plan's objectives are not met, the return on these investments may be lower than expected. If Groupe BPCE does not achieve the targets defined in its BPCE 2024 strategic plan, its financial position and results could be more or less significantly affected.

The physical and transition components of climate risk, together with their repercussions for economic players, could adversely affect the activities, income and financial position of Groupe BPCE.

The risks associated with climate change are factors that exacerbate existing risks, including credit risk, operational risk and market risk. In particular, BPCE is exposed to physical and transition climate risk. They potentially carry an image and/or reputation risk.

Physical risk leads to increased economic costs and financial losses resulting from the severity and increased frequency of extreme weather events related to climate change (such as heat waves, landslides, floods, late frosts, fires and storms), as well as long-term gradual changes in climate (such as changes in rainfall patterns, extreme weather variability, and rising sea levels and average temperatures). It could have an extensive impact in terms of scope and magnitude, that may affect a wide variety of geographic areas and economic sectors relevant to Groupe BPCE. For example, the Cévennes episodes that affect the south-east of France every year can cause buildings, factories and offices to flood, slowing down or even making it impossible for some of the Group's customers to carry out their activities. Moreover, physical climate risk can spread along the value chain of Groupe BPCE's corporate customers, which can lead to default and thus generate financial losses for Groupe BPCE. These physical climate risks are likely to increase and could lead to significant losses for Groupe BPCE.

The transition risk is connected to the process of adjusting to a low-carbon economy. The process of reducing emissions is likely to have a significant impact on all sectors of the economy by affecting the value of financial assets and the profitability of companies. The increase in costs related to this energy transition for economic players, whether corporates or individual customers, could lead to an increase in defaults and thus significantly increase Groupe BPCE's losses. For example, the French "Énergie-Climat" law of November 8, 2019 is expected to limit from 2023, and completely limit from 2028, the sale and rental of real estate with very low energy performances. Some of Groupe BPCE's customers will therefore have to plan renovation work for a possible future sale or lease of such type of properties. The risk lies in the impossibility for Groupe BPCE's customers to carry out this costly work and consequently being unable to complete the financial transaction necessary to balance their budget. These customers of Groupe BPCE could therefore become insolvent, which would result in significant financial losses for Groupe BPCE.

Groupe BPCE may encounter difficulties in adapting, implementing and incorporating its policy governing acquisitions or joint ventures.

Although acquisitions are not a major part of Groupe BPCE's current strategy, the Group may nonetheless consider acquisition or partnership opportunities in the future. Although Groupe BPCE carries out an in-depth analysis of any potential acquisitions or joint ventures, in general it is impossible to carry out an exhaustive appraisal in every respect. As a result, Groupe BPCE may have to manage initially unforeseen liabilities. Similarly, the results of the acquired company or joint venture may prove disappointing and the expected synergies may not be realized in whole or in part, or the transaction may give rise to higher-than-expected costs. Groupe BPCE may also encounter difficulties with the consolidation of new entities. The failure of an announced acquisition or failure to consolidate a new entity or joint venture may place a strain on Groupe BPCE's profitability. This situation may also lead to the departure of key employees. In the event that Groupe BPCE is obliged to offer financial incentives to its employees in order to retain them, this situation may also lead to an increase in costs and a decline in profitability. Joint ventures expose Groupe BPCE to additional risks and uncertainties in that it may depend on systems, controls and persons that are outside its control and may, in this respect, see its liability incurred, suffer losses or incur damage to its reputation. Moreover, conflicts or disagreements between Groupe BPCE and its joint venture partners may have a negative impact on the targeted benefits of the joint venture. At December 31, 2022, the total investments accounted for using the equity method amounted to €1.7 billion. For further information, please refer to Note 12.4 "Partnerships and associates" to the consolidated financial statements of Groupe BPCE, included in the 2022 universal registration document.

Intense competition in France, Groupe BPCE's main market, or internationally, may cause its net income and profitability to decline.

Groupe BPCE's main business lines operate in a very competitive environment both in France and other parts of the world where it does substantial business. This competition is heightened by consolidation, either through mergers and acquisitions or cooperation and arrangements. Consolidation has created a certain number of companies which, like Groupe BPCE, can offer a wide range of products and services ranging from insurance, loans and deposits to brokerage, investment banking and asset management. Groupe BPCE is in competition with other entities based on a number of factors, including the execution of transactions, products and services offered, innovation, reputation and price. If Groupe BPCE is unable to maintain its competitiveness in France or in its other major markets by offering a range of attractive and profitable products and services, it may lose market share in certain key business lines or incur losses in some or all of its activities.

For example, at December 31, 2022, in France, Groupe BPCE was the number one bank for SMEs[1], and number two for individual[2]. It has a 26.2% market share in home loans[2]. For Retail Banking and Insurance, customer loan outstandings amounted to €701 billion and customer deposits & savings[3] to €888 billion (for more information on the contribution of each business line, and each network, see Section 1.4 "The Group's business lines" of the 2022 universal registration document).

In addition, any slowdown in the global economy or in the economies in which Groupe BPCE's main markets are located is likely to increase competitive pressure, in particular through increased pressure on prices and a contraction in the volume of activity of Groupe BPCE and its competitors. New, more competitive rivals subject to separate or more flexible regulation or other prudential ratio requirements could also enter the market. These new market participants would thus be able to offer more competitive products and services. Advances in technology and the growth of e-commerce have made it possible for institutions other than custodians to offer products and services that were traditionally considered as banking products, and for financial institutions and other companies to provide electronic and internet-based financial solutions, including electronic securities trading. These new entrants may put downward pressure on the price of Groupe BPCE's products and services or affect Groupe BPCE's market share. Advances in technology could lead to rapid and unexpected changes on Groupe BPCE's markets of operation. Groupe BPCE's competitive position, net earnings and profitability may be adversely affected should it prove unable to adequately adapt its activities or strategy in response to such changes.

Groupe BPCE's ability to attract and retain skilled employees is paramount to the success of its business and failing to do so may affect its performance.

The employees of Groupe BPCE entities are the Group's most valuable resource. Competition to attract qualified employees is fierce in many areas of the financial services sector. Groupe BPCE's earnings and performance depend on its ability to attract new employees and retain and motivate existing employees. Changes in the economic environment (in particular tax and other measures aimed at limiting the pay of banking sector employees) may compel Groupe BPCE to transfer its employees from one unit to another, or reduce the workforce in certain business lines, which may cause temporary disruptions due to the time required for employees to adapt to their new duties, and may limit Groupe BPCE's ability to benefit from improvements in the economic environment. This may prevent Groupe BPCE from taking advantage of potential opportunities in terms of sales or efficiency, which could in turn affect its performance.

At December 31, 2022, Groupe BPCE had 99,800 employees. 8,700 permanent employees were recruited during the year (for more information, see Section 2.4 "A committed and socially responsible group" of the 2022 universal registration document).

(1) 53% (rank 1) in terms of total penetration rate (Kantar 2021 SME-SMI survey).
(2) Retail market share: 21.9% in household savings and 26.2% in mortgage loans to households (Banque de France Q3-2022). Overall penetration rate of 29.7% (rank 2) among retail customers (SOFIA Kantar study, March 2021). For professionals: 38.4% (rank 2) penetration rate among professional customers and individual entrepreneurs (Pépites CSA 2020-2021 survey).
(3) Balance sheet and financial savings.

Financial risks

Significant changes in interest rates may have a material adverse impact on Groupe BPCE's net banking income and profitability.

The net interest margin collected by Groupe BPCE during a given period represents a significant portion of its net banking income. Consequently, changes in the latter have a significant impact on Groupe BPCE's profitability. The cost of the resource as well as the conditions of return on the asset and in particular those attached to new production are therefore very sensitive elements, particularly to factors that may be beyond Groupe BPCE's control. These significant changes can have significant temporary or lasting repercussions, even if the rise in interest rates should be generally favorable in the medium to long term.

After a decade of low or even negative interest rates, a sharp and rapid rise in interest rates and strong inflationary pressures have emerged, reinforced by the consequences of the health crisis and the conflict in Ukraine. The exposure to interest rate risk was increased by the combination of unfavorable elements, namely the increase in inflation (major impact on regulated rates), the rapid exit from the negative interest rate policy (deposit arbitrage), the rise in interbank spreads, while, conversely, new loan production is constrained by the attrition rate and the competitive environment.

The sensitivity of the net present value of Groupe BPCE's balance sheet to a +/-200 bps variation in interest rates remains below the 15% Tier 1 limit. At December 31, 2022, Groupe BPCE's sensitivity to interest rate increases stood at -13.94% compared to Tier 1 *versus* -11.37% at December 31, 2021. As of September 30, 2022, the small upward shock (+25 bps) would have a negative impact of 1.4% on the projected net interest margin (expected loss of €91 million) over a rolling year, whereas the small downward scenario (-25 bps) would have a positive impact of 1.5% (expected gain of €95 million).

Market fluctuations and volatility expose Groupe BPCE to losses in its trading and investment activities, which may adversely impact Groupe BPCE's results and financial position.

In the course of its third-party trading or investment activities, Groupe BPCE may carry positions in the bond, currency, commodity and equity markets, and in unlisted securities, real estate assets and other asset classes. These positions may be affected by volatility on the markets (especially the financial markets), *i.e.* the degree of price fluctuations over a given period on a given market, regardless of the levels on the market in question. Certain market configurations and fluctuations may also generate losses on a broad range of trading and hedging products used, including swaps, futures, options and structured products, which could adversely impact Groupe BPCE's results and financial position. Similarly, extended market declines and/or major crises may reduce the liquidity of certain asset classes, making it difficult to sell certain assets and in turn generating material losses.

The market risk-weighted assets totaled €15.4 billion, *i.e.* around 3% of Groupe BPCE's total risk-weighted assets, on December 31, 2022. For information, the weight of Corporate & Investment Banking activities in the Group's net banking income was 15% for the year 2022. For more detailed information and examples, see Note 10.1.2 "Analysis of financial assets and liabilities classified in level 3 of the fair value hierarchy" to the consolidated financial statements of Groupe BPCE, included in the 2022 universal registration document.

Groupe BPCE is dependent on its access to funding and other sources of liquidity, which may be limited for reasons outside its control, thus potentially having a material adverse impact on its results.

Access to short-term and long-term funding is critical for the conduct of Groupe BPCE's business. Non-collateralized sources of funding for Groupe BPCE include deposits, issues of long-term debt and short/medium-term negotiable debt securities, banks loans and credit lines. Groupe BPCE also uses guaranteed financing, in particular through the conclusion of repurchase agreements and the issuance of covered bonds. If Groupe BPCE were unable to access the secured and/or unsecured debt market at conditions deemed acceptable, or incurred an unexpected outflow of cash or collateral, including a significant decline in customer deposits, its liquidity may be negatively affected. Furthermore, if Groupe BPCE were unable to maintain a satisfactory level of customer deposits (*e.g.* in the event its competitors offer higher rates of return on deposits), it may be forced to obtain funding at higher rates, which would reduce its net interest income and results.

Groupe BPCE's liquidity, and therefore its results, may also be affected by unforeseen events outside its control, such as general market disruptions, which may in particular be related to geopolitical or health crises, operational hardships affecting third parties, negative opinions on financial services in general or on the short/long-term outlook for Groupe BPCE, changes in Groupe BPCE's credit rating, or even the perception of the position of Groupe BPCE or other financial institutions among market operators.

Groupe BPCE's access to the capital markets, and the cost of long-term unsecured funding, are directly related to changes in its credit spreads on the bond and credit derivatives markets, which it can neither predict nor control. Liquidity constraints may have a material adverse impact on Groupe BPCE's financial position, results and ability to meet its obligations to its counterparties. Similarly, a change in the monetary policy stance, in particular that of the European Central Bank, may impact Groupe BPCE's financial position.

However, to deal with these risk factors, Groupe BPCE has liquidity reserves made up of cash deposits with central banks and available securities and receivables eligible for central bank refinancing. Groupe BPCE's liquidity reserve amounted to €322 billion on December 31, 2022, covering 150% short-term funding and short-term maturities of MLT debt. The one-month LCR (Liquidity Coverage Ratio) averaged 142% over 12 months on December 31, 2022 *versus* 161% on December 31, 2021. Given the importance of these risks for Groupe BPCE in terms of impact and probability, these risks are monitored proactively and closely, with Groupe BPCE also pursuing a very active policy of diversification of its investors.

Changes in the fair value of Groupe BPCE's portfolios of securities and derivative products, and its own debt, are liable to have an adverse impact on the net carrying amount of these assets and liabilities, and as a result on Groupe BPCE's net income and equity.

The net carrying amount of Groupe BPCE's securities, derivative products and other types of assets at fair value, and of its own debt, is adjusted (at balance sheet level) at the date of each new financial statement. These adjustments are predominantly based on changes in the fair value of assets and liabilities during an accounting period, *i.e.* changes taken to profit or loss or recognized directly in other comprehensive income. Changes recorded in the income statement, but not offset by corresponding changes in the fair value of other assets, have an impact on net banking income and thus on net income. All fair value adjustments have an impact on equity and thus on Groupe BPCE's capital adequacy ratios. Such adjustments are also liable to have an adverse impact on the net carrying amount of Groupe BPCE's assets and liabilities, and thus on its net income and equity. The fact that fair value adjustments are recorded over an accounting period does not mean that additional adjustments will not be necessary in subsequent periods.

On December 31, 2022, financial assets at fair value totaled €193 billion (with approximately €182 billion in financial assets at fair value held for trading purposes) and financial liabilities at fair value totaled €185 billion (with €156 billion in financial liabilities at fair value held for trading purposes). For more detailed information, see also Note 4.3 "Gains (losses) on financial instruments at fair value through profit or loss", Note 4.4 "Gains (losses) on financial assets measured at fair value through other comprehensive income before tax", Note 5.2 "Financial assets and liabilities at fair value through profit or loss" and Note 5.4 "Financial assets at fair value through other comprehensive income" to the consolidated financial statements of Groupe BPCE in the 2022 universal registration document.

Groupe BPCE's revenues from brokerage and other activities associated with fee and commission income may decrease in the event of market downturns.

A market downturn is liable to lower the volume of transactions (particularly financial services and securities transactions) executed by Groupe BPCE entities for their customers and as a market maker, thus reducing the net banking income from these activities. In particular, in the event of a decline in market conditions, Groupe BPCE may record a lower volume of customer transactions and a drop in the corresponding fees, thus reducing revenues earned from this activity. Furthermore, as management fees invoiced by Groupe BPCE entities to their customers are generally based on the value or performance of portfolios, any decline in the markets causing the value of these portfolios to decrease or generating an increase in the amount of redemptions would reduce the revenues earned by these entities through the distribution of mutual funds or other investment products (for the Caisses d'Epargne and the Banques Populaires) or through asset management activities, by an unfavorable evolution of management or superperformance fees. In addition, any deterioration in the economic environment could have an unfavorable impact on the seed money contributed to asset management structures with a risk of partial or total loss.

Even where there is no market decline, if funds managed for third parties throughout Groupe BPCE and other Groupe BPCE products underperform the market, redemptions may increase and/or inflows decrease as a result, with a potential corresponding impact on revenues from the asset management business.

In 2022, the total net amount of fees and commissions received was €11,929 million, representing 46% of Groupe BPCE's net banking income. The revenues earned from fees and commissions for financial services came to €513 million and the revenues earned from fees and commissions for securities transactions amounted to €237 million. For more detailed information on the amounts of fees and commissions received by Groupe BPCE, see Note 4.2 ("Fee and commission income and expenses") to the consolidated financial statements of Groupe BPCE in the 2022 universal registration document.

Downgraded credit ratings could have an adverse impact on BPCE's funding cost, profitability and business continuity.

Groupe BPCE's long-term ratings on December 31, 2022 were AA- for Fitch Ratings, A1 for Moody's, A+ for R&I and A for Standard & Poor's. The decision to downgrade these credit ratings may have a negative impact on the funding of BPCE and its affiliates active in the financial markets. A ratings downgrade may affect Groupe BPCE's liquidity and competitive position, increase funding costs, limit access to financial markets and trigger obligations under some bilateral contracts governing trading, derivative and collateralized funding transactions, thus adversely impacting its profitability and business continuity.

Furthermore, BPCE's unsecured long-term funding cost is directly linked to its credit spreads (the yield spread over and above the yield on government issues with the same maturity that is paid to bond investors), which in turn are heavily dependent on its ratings. An increase in credit spreads may materially raise BPCE's funding cost. Shifts in credit spreads are correlated to the market and sometimes subject to unforeseen and highly volatile changes. Credit spreads are also influenced by market perception of issuer solvency and are associated with changes in the purchase price of Credit Default Swaps backed by certain BPCE debt securities. Accordingly, a change in perception of an issuer solvency due to a rating downgrade could have an adverse impact on that issuer's profitability and business continuity.

Credit and counterparty risks

Groupe BPCE is exposed to credit and counterparty risks that could have a material adverse effect on the Group's business, financial position and income.

Groupe BPCE is significantly exposed to credit and counterparty risk through its financing or market activities. The Group could thus incur losses in the event of default by one or more counterparties, in particular if the Group encounters legal or other difficulties in exercising its collateral or if the value of the collateral does not allow it to fully cover the exposure in the event of a default. Despite the due diligence carried out by the Group, aimed at limiting the effects of having a concentrated credit portfolio, counterparty defaults may be amplified within a specific economic sector or world region by the effects of interdependence between these counterparties. Default by one or more major counterparties could thus have a material adverse effect on the Group's cost of risk, income and financial position.

For information, on December 31, 2022, Groupe BPCE's gross exposure to credit risk amounted to €1,484 billion, with the following breakdown for the main types of counterparty: 38% for retail customers, 28% for corporates, 17% for central banks and other sovereign exposures, and 6% for the public sector and similar entities. The credit risk-weighted assets amounted to €400 billion (including counterparty risk).

The main economic sectors to which the Group was exposed in its non-financial corporations portfolio were Real Estate (37% of gross exposures at December 31, 2022), Wholesale and Retail Trade (11%), Finance/Insurance (10%) and Manufacturing industry (7%).

Groupe BPCE develops its activities mainly in France. The Group's gross exposure (gross carrying amount) to France was €1,046 billion, representing 84% of the total gross exposure. The remaining exposures were mainly concentrated in the United States, for 5%, with other countries accounting for 11% of the total gross exposures.

For further information, please see Chapters 5 "Credit risks" and 6 "Counterparty risk" in this document.

A substantial increase in impairments or provisions for expected credit losses recognized in respect of Groupe BPCE's portfolio of loans and advances could have a material adverse effect on its income and financial position.

In the course of its lending activities, Groupe BPCE regularly recognizes charges for asset impairments in order to reflect, if necessary, actual or potential losses on its portfolio of loans and advances. Such impairments are booked in the income statement under "Cost of risk." Groupe BPCE's total charges for asset impairments are based on the Group's measurement of past losses on loans, volumes and types of loans granted, industry standards, loans in arrears, economic conditions and other factors associated with the recoverability of various types of loans. While Groupe BPCE makes every effort to set aside a sufficient level of provisions for asset impairment expenses, its lending activities may cause it in the future to have to increase its expenses for losses on loans, due to a rise in non-performing loans or for other reasons such as the deterioration of market conditions or factors affecting certain countries. Any substantial increase in charges for losses on loans, material change in Groupe BPCE's estimate of the risk of loss associated with its portfolio of loans, or any loss on loans exceeding past impairment expenses, could have an adverse impact on Groupe BPCE's results and financial position.

For information, Groupe BPCE's cost of risk amounted to €2,000 million in 2022 compared to €1,783 million in 2021, with credit risks accounting for 87% of Groupe BPCE's risk-weighted assets. On the basis of gross exposures, 38% relate to retail customers and 28% to corporate customers (of which 70% of exposures are located in France).

Consequently, the risk associated with a significant increase in impairment expenses on assets booked to Groupe BPCE's loans and advances portfolio is significant for Groupe BPCE in terms of impact and probability, and is therefore monitored carefully and proactively. In addition, prudential requirements supplement these provisioning mechanisms *via* the prudential backstop process, which results in a total deduction in equity of non-performing loans beyond a certain maturity in line with the quality of the guarantees and according to a regulatory timetable.

A decline in the financial strength and performance of other financial institutions and market players may have an unfavorable impact on Groupe BPCE.

Groupe BPCE's ability to execute transactions may be affected by a decline in the financial strength of other financial institutions and market players. Institutions are closely interconnected owing to their trading, clearing, counterparty and financing operations. A default by a significant sector player (systematic risk), or even mere rumors or concerns regarding one or more financial institutions or the financial industry in general, may lead to a general contraction in market liquidity and subsequently to losses or further defaults in the future. Groupe BPCE is directly or indirectly exposed to various financial counterparties, such as investment service providers, commercial or investment banks, clearing houses and CCPs, mutual funds, hedge funds, and other institutional clients, with which it regularly conducts transactions. The default or failure of any such counterparties may have an adverse impact on Groupe BPCE's financial position. Moreover, Groupe BPCE may be exposed to the risk associated with the growing involvement of operators subject to little or no regulation in its business sector and to the emergence of new products subject to little or no regulation (including in particular crowdfunding and trading platforms). This risk would be exacerbated if the assets held as collateral by Groupe BPCE could not be sold or if their selling price would not cover all of Groupe BPCE's exposure to defaulted loans or derivatives, or in the event of fraud, embezzlement or other misappropriation of funds committed by financial sector participants in general to which Groupe BPCE is exposed, or if a key market operator such as a CCP defaults.

The exposures to "financial institutions" represented 4% of Groupe BPCE's total gross exposures (€1,484 billion) on December 31, 2022. In geographic terms, 69% of gross exposures to "institutions" are located in France.

Non-financial risks

In the event of non-compliance with applicable laws and regulations, Groupe BPCE could be exposed to significant fines and other administrative and criminal penalties that could have a material adverse effect on its financial position, activities and reputation.

The risk of non-compliance is defined as the risk of sanction – judicial, administrative or disciplinary – but also of financial loss or damage to reputation, resulting from non-compliance with laws and regulations, professional standards and practices, and ethical standards specific to banking and insurance activities, whether national or international.

The banking and insurance sectors are subject to increased regulatory oversight, both in France and internationally. Recent years have seen a particularly substantial increase in the volume of new regulations that have introduced significant changes affecting both the financial markets and the relationships between investment service providers and customers or investors (*e.g.* MIFID II, PRIIPS, the directive on the Insurance Distribution, Market Abuse Regulation, fourth Anti-Money Laundering and Terrorism Financing directive, Personal Data Protection Regulation, Benchmark Index Regulation, etc.). These new regulations have major impacts on the company's operational processes.

The realization of the risk of non-compliance could result, for example, in the use of inappropriate means to promote and market the bank's products and services, inadequate management of potential conflicts of interest, the disclosure of confidential information, or privileged, failure to comply with due diligence on entering into relations with suppliers and customers, particularly in terms of financial security (in particular the fight against money laundering and the financing of terrorism, compliance with embargoes, the fight against fraud or corruption).

Within BPCE, the Compliance function is responsible for overseeing the system for preventing and managing non-compliance risks. Despite this system, Groupe BPCE remains exposed to the risk of fines or other significant sanctions from the regulatory and supervisory authorities, as well as civil or criminal legal proceedings that could have a significant adverse impact on its financial position, activities and reputation.

Any interruption or failure of the information systems belonging to Groupe BPCE or third parties may generate losses (including commercial losses) and may have a material adverse impact on Groupe BPCE's results.

As is the case for the majority of its competitors, Groupe BPCE is highly dependent on information and communication systems, as a large number of increasingly complex transactions are processed in the course of its activities. Any failure, interruption or malfunction in these systems may cause errors or interruptions in the systems used to manage customer accounts, general ledgers, deposits, transactions and/or to process loans. For example, if Groupe BPCE's information systems were to malfunction, even for a short period, the affected entities would be unable to meet their customers' needs in time and could thus lose transaction opportunities. Similarly, a temporary failure in Groupe BPCE's information systems despite back-up systems and contingency plans could also generate substantial information recovery and verification costs, or even a decline in its proprietary activities if, for example, such a failure were to occur during the implementation of a hedging transaction. The inability of Groupe BPCE's systems to adapt to an increasing volume of transactions may also limit its ability to develop its activities and generate losses, particularly losses in sales, and may therefore have a material adverse impact on Groupe BPCE's results.

Groupe BPCE is also exposed to the risk of malfunction or operational failure by one of its clearing agents, foreign exchange markets, clearing houses, custodians or other financial intermediaries or external service providers that it uses to carry out or facilitate its securities transactions. As interconnectivity with its customers continues to grow, Groupe BPCE may also become increasingly exposed to the risk of the operational malfunction of customer information systems. Groupe BPCE's communication and information systems, and those of its customers, service providers and counterparties, may also be subject to failures or interruptions resulting from cybercriminal or cyberterrorist acts. For example, as a result of its digital transformation, Groupe BPCE's information systems are becoming increasingly open to the outside (cloud computing, big data, etc.). Many of its processes are gradually going digital. Use of the Internet and connected devices (tablets, smartphones, apps used on tablets and mobiles, etc.) by employees and customers is on the rise, increasing the number of channels serving as potential vectors for attacks and disruptions, and the number of devices and applications vulnerable to attacks and disruptions. Consequently, the software and hardware used by Groupe BPCE's employees and external agents are constantly and increasingly subject to cyberthreats. As a result of any such attacks, Groupe BPCE may face malfunctions or interruptions in its own systems or in third-party systems that may not be adequately resolved. Any interruption or failure of the information systems belonging to Groupe BPCE or third parties may generate losses (including commercial losses) due to the disruption of its operations and the possibility that its customers may turn to other financial institutions during and/or after any such interruptions or failures.

The risk associated with any interruption or failure of the information systems belonging to Groupe BPCE or third parties is significant for Groupe BPCE in terms of impact and probability, and is therefore carefully and proactively monitored.

Reputational and legal risks could unfavorably impact Groupe BPCE's profitability and business outlook.

Groupe BPCE's reputation is of paramount importance when it comes to attracting and retaining customers. The use of inappropriate means to promote and market Group products and services, inadequate management of potential conflicts of interest, legal and regulatory requirements, ethical issues, money laundering laws, economic sanctions, data security policies, sales and trading practices, and inadequate customer protection systems could adversely affect Groupe BPCE's reputation. Its reputation could also be harmed by inappropriate employee behavior, cybercrime or cyber terrorist attacks on Groupe BPCE's information and communication systems, or any fraud, embezzlement or other misappropriation of funds committed by financial sector participants to which Groupe BPCE is exposed, or any legal ruling or regulatory action with a potentially unfavorable outcome. Any such harm to Groupe BPCE's reputation may have a negative impact on its profitability and business outlook.

Ineffective management of reputational risk could also increase Groupe BPCE's legal risk, the number of legal disputes in which it is involved and the amount of damages claimed, or may expose the Group to regulatory sanctions. For more information, see Chapter 10 "Legal risks" of this document. The financial consequences of these disputes may have an impact on the financial position of the Group, in which case they may also adversely impact Groupe BPCE's profitability and business outlook.

Unforeseen events may interrupt Groupe BPCE's operations and cause losses and additional costs.

Unforeseen events, such as a serious natural disaster, events related to climate risk (physical risk directly associated with climate change), new pandemics, attacks or any other emergency situation can cause an abrupt interruption in the operations of Groupe BPCE entities, affecting in particular the Group's core business lines (liquidity, payment instruments, securities services, loans to individual and corporate customers, and fiduciary services) and trigger material losses, if the Group is not covered or not sufficiently covered by an insurance policy. These losses could relate to material assets, financial assets, market positions or key employees, and have a direct and potentially material impact on Groupe BPCE's net income. Moreover, such events may also disrupt Groupe BPCE's infrastructure, or that of a third party with which Groupe BPCE does business, and generate additional costs (relating in particular to the cost of re-housing the affected personnel) and increase Groupe BPCE's costs (such as insurance premiums). Such events may invalidate insurance coverage of certain risks and thus increase Groupe BPCE's overall level of risk.

At December 31, 2022, the operational risks accounted for 9% of Groupe BPCE's risk-weighted assets, as on December 31, 2021. At December 31, 2022, Groupe BPCE's losses in respect of operational risk could be primarily attributed to the "Payment and Settlements" business line (35%). They were concentrated in the Basel category external fraud for 40%.

The failure or inadequacy of Groupe BPCE's risk management and hedging policies, procedures and strategies may expose it to unidentified or unexpected risks which may trigger unforeseen losses.

Groupe BPCE's risk management and hedging policies, procedures and strategies may not succeed in effectively limiting its exposure to all types of market environments or all kinds of risks, and may even prove ineffective for some risks that the Group was unable to identify or anticipate. Furthermore, the risk management techniques and strategies employed by Groupe BPCE may not effectively limit its exposure to risk and do not guarantee that overall risk will actually be lowered. These techniques and strategies may prove ineffective against certain types of risk, in particular risks that Groupe BPCE had not already identified or anticipated, given that the tools used by Groupe BPCE to develop risk management procedures are based on assessments, analyses and assumptions that may prove inaccurate. Some of the indicators and qualitative tools used by Groupe BPCE to manage risk are based on the observation of past market performance. To measure risk exposures, the heads of risk management carry out a statistical analysis of these observations.

These tools or indicators may not be capable of predicting future exposure to risk. For example, these risk exposures may be due to factors that Groupe BPCE may not have anticipated or correctly assessed in its statistical models or due to unexpected or unprecedented shifts in the market. This would limit Groupe BPCE's risk management capability. As a result, losses incurred by Groupe BPCE may be higher than those anticipated on the basis of past measurements. Moreover, the Group's quantitative models cannot factor in all risks. While no significant problem has been identified to date, the risk management systems are subject to the risk of operational failure, including fraud. Some risks are subject to a more qualitative analysis, which may prove inadequate and thus expose Groupe BPCE to unexpected losses.

Actual results may vary compared to assumptions used to prepare Groupe BPCE's financial statements, which may expose it to unexpected losses.

In accordance with current IFRS standards and interpretations, Groupe BPCE must base its financial statements on certain estimates, in particular accounting estimates relating to the determination of provisions for non-performing loans and advances, provisions for potential claims and litigation, and the fair value of certain assets and liabilities. If the values used for the estimates by Groupe BPCE prove to be materially inaccurate, in particular in the event of major and/or unexpected market trends, or if the methods used to calculate these values are modified due to future changes in IFRS standards or interpretations, Groupe BPCE may be exposed to unexpected losses.

Information on the use of estimates and judgments is provided in Note 2.3 "Use of estimates and judgments" to the consolidated financial statements of Groupe BPCE in the 2022 universal registration document.

Insurance risks

Groupe BPCE generates 11% of its net banking income from its insurance businesses. The net banking income from life and non-life insurance activities amounted to €2,927 million for the year 2022, compared to €2,860 million for 2021.

A deterioration in market conditions, and in particular excessive interest rate increases or decreases, could have a material adverse impact on the personal insurance business and income of the Group.

The main risk to which Groupe BPCE's insurance business subsidiaries are exposed in their personal insurance business is market risk. Exposure to market risk is mainly related to the capital guarantee as applicable to euro-denominated savings products.

Among market risks, interest rate risk is structurally significant for BPCE Assurances, as its general funds consist primarily of bonds. Interest rate fluctuations may:

- in the case of higher rates: reduce the competitiveness of the euro-denominated offer (by making new investments more attractive) and trigger waves of redemptions and major arbitrages on unfavorable terms with unrealized capital losses on outstanding bonds;
- in the case of lower rates: in the long term, make the return on general funds too low to enable them to honor their capital guarantees.

As a result of the allocation of general funds, the widening of spreads and the decline in the equity markets could also have a significant unfavorable impact on the results of Groupe BPCE's life and health insurance business, through the recording of provisions for impairment due to the decline in the valuation of investments at fair value through profit or loss.

A mismatch between the loss experience expected by the insurer and the amounts actually paid by the Group to policyholders could have a significant adverse impact on its non-life insurance business and on the personal protection insurance portion of its insurance business, as well as its results and its financial position.

The main risk to which Groupe BPCE's insurance business subsidiaries are exposed in connection with these latter activities is underwriting risk. This risk results from a mismatch between i) claims actually recorded and benefits actually paid as compensation for these claims and ii) the assumptions used by the subsidiaries to set the prices for their insurance products and to establish technical reserves for potential compensation.

The Group uses both its own experience and industry data to develop estimates of future policy benefits, including information used in pricing insurance products and establishing the related actuarial liabilities. However, actual experience may not match these estimates, and unforeseen risks such as pandemics or natural disasters could result in higher-than-expected payments to policyholders. In this respect, changes in climate phenomena (known as "physical" climate risks) are subject to particular vigilance.

In the event that the amounts actually paid by the Group to policyholders are greater than the underlying assumptions initially used to establish provisions, or if events or trends lead the Group to modify the underlying assumptions, the Group may be exposed to more significant liabilities than expected, which could have a negative impact on the non-life insurance business for the personal protection portion, as well as on the results and financial position of the Group.

The various actions taken over the last few years, particularly in terms of financial coverage, reinsurance, business diversification and management of investments, have also contributed to the solidity and resilience of the solvency of BPCE Assurances. It should be noted that the deterioration of the economic and financial environment, in particular the decline in the equity markets and the level of interest rates, could adversely affect the solvency of BPCE Assurances, by adversely affecting future margins.

Regulatory risks

Groupe BPCE is subject to significant regulation in France and in several other countries around the world where it operates; regulatory measures and changes could have a material adverse impact on Groupe BPCE's business and results.

The business and results of Group entities may be materially impacted by the policies and actions of various regulatory authorities in France, other governments of the European Union, the United States, foreign governments and international organizations. Such constraints may limit the ability of Groupe BPCE entities to expand their businesses or conduct certain activities. The nature and impact of future changes in such policies and regulatory measures are unpredictable and are beyond Groupe BPCE's control. Moreover, the general political environment has evolved unfavorably for banks and the financial industry, resulting in additional pressure on the part of legislative and regulatory bodies to adopt more stringent regulatory measures, despite the fact that these measures may have adverse consequences on lending and other financial activities, and on the economy. Because of the continuing uncertainty surrounding the new legislative and regulatory measures, it is not possible to predict what impact they will have on Groupe BPCE; however, this impact may be highly adverse.

Groupe BPCE may have to reduce the size of some of its activities to comply with new requirements. New measures are also liable to increase the cost of compliance with new regulations. This could cause revenues and consolidated profit to decline in the relevant business lines, sales to decline in certain activities and asset portfolios, and asset impairment expenses.

The purpose of the 2019 adoption of the final versions of the Banking Package was to align prudential requirements for banks with Basel III standards. The implementation of these reforms may result in higher capital and liquidity requirements, which could impact Groupe BPCE funding costs.

On November 11, 2020, the Financial Stability Board ("FSB"), in consultation with the Basel Committee on Banking Supervision and national authorities, reported the 2020 list of global systemically important banks ("G-SIBs"). Groupe BPCE is classified as a G-SIB by the FSB. Groupe BPCE also appears on the list of global systematically important institutions ("G-SIIs").

These regulatory measures, which may apply to various Groupe BPCE entities, and any changes in such measures may have a material adverse impact on Groupe BPCE's business and results.

Legislation and regulations have recently been enacted or proposed in recent years with a view to introducing a number of changes, some permanent, in the global financial environment. These new measures, aimed at avoiding a new global financial crisis, have significantly altered the operating environment of Groupe BPCE and other financial institutions, and may continue to alter this environment in the future. Groupe BPCE is exposed to the risk associated with changes in legislation and regulations. These include the new prudential backstop rules, which measure the difference between the actual provisioning levels of defaulted loans and guidelines including target rates, depending on the age of the default and the presence of guarantees.

In today's evolving legislative and regulatory environment, it is impossible to foresee the impact of these new measures on Groupe BPCE. The development of programs aimed at complying with these new legislative and regulatory measures (and updates to existing programs), and changes to the Group's information systems in response to or in preparation for new measures generates significant costs for the Group, and may continue to do so in the future. Despite its best efforts, Groupe BPCE may also be unable to fully comply with all applicable laws and regulations and may thus be subject to financial or administrative penalties. Furthermore, new legislative and regulatory measures may require the Group to adapt its operations and/or may affect its results and financial position. Lastly, new regulations may require Groupe BPCE to strengthen its capital or increase its total funding costs.

The risk associated with regulatory measures and subsequent changes to such measures is significant for Groupe BPCE in terms of impact and probability, and is therefore carefully and proactively monitored.

BPCE may have to help entities belonging to the financial solidarity mechanism in the event they experience financial difficulties, including entities in which BPCE holds no economic interest.

As the central institution of Groupe BPCE, BPCE is responsible for ensuring the liquidity and solvency of each regional bank (Banques Populaires and Caisses d'Epargne) and the other members of the group of affiliates which have credit institution status subject to French regulations. The group of affiliates includes BPCE subsidiaries, such as Natixis, Crédit Foncier de France, Oney and Banque Palatine. For Groupe BPCE, all entities affiliated with the central institution of Groupe BPCE benefit from a guarantee and solidarity mechanism, the aim of which, in accordance with Articles L. 511-31, L. 512-107-5 and L. 512-107-6 of the French Monetary and Financial Code, is to ensure the liquidity and solvency of all affiliated entities and to organize financial solidarity throughout the Group.

This financial solidarity is based on legislative provisions establishing a legal principle of solidarity with obligation of results requiring the central institution to restore the liquidity or solvency of affiliates in difficulty, and/or all of the Group's affiliates, by virtue of the unlimited nature of the principle of solidarity, BPCE is entitled at any time to ask any one or more or all of the affiliates to contribute to the financial efforts necessary to restore the situation, and may, if necessary, mobilize up to all the cash and cash equivalents of the affiliates in the event of difficulty for one or more of them.

The three guarantee funds created to cover Groupe BPCE's liquidity and insolvency risks are described in Note 1.2 "Guarantee mechanism" to the consolidated financial statements of Groupe BPCE included in the 2022 universal registration document. At December 31, 2022, the Banque Populaire and Caisse d'Epargne funds each contained €450 million. The Mutual Guarantee Fund holds €157 million in deposits per network. The regional banks are obligated to make additional contributions to the guarantee fund on their future profits. While the guarantee fund represents a substantial source of resources to fund the solidarity mechanism, there is no guarantee these revenues will be sufficient. If the guarantee funds prove insufficient, BPCE, due to its missions as a central institution, will have to do everything necessary to restore the situation and will have the obligation to make up the deficit by implementing the internal solidarity mechanism that it has put in place, by mobilizing its own resources, and may also make unlimited use of the resources of several or all of its affiliates.

As a result of this obligation, if a member of the Group were to encounter major financial difficulties, the event underlying these financial difficulties could have a negative impact on the financial position of BPCE and that of the other affiliates thus called upon to provide support under the principle of financial solidarity.

Investors in BPCE's securities could suffer losses if BPCE and all of its affiliates were to be subject to liquidation or resolution procedures.

The EU regulation on the Single Resolution Mechanism No. 806/214 and the EU directive for the recovery and resolution of banks No. 2014/59, as amended by the EU directive No. 2019/879 (the "BRRD"), as transposed into French law in Book VI of the French Monetary and Financial Code, give the resolution authorities the power to impair BPCE securities or, in the case of debt securities, to convert them to equity.

Resolution authorities may write down or convert capital instruments, such as BPCE's Tier 2 subordinated debt securities, if the issuing institution or the group to which it belongs is failing or likely to fail (and there is no reasonable prospect that another measure would avoid such failure within a reasonable time period), becomes non-viable, or requires extraordinary public support (subject to certain exceptions). They shall write down or convert capital instruments before opening a resolution proceeding, or if doing so is necessary to maintain the viability of an institution. Any write-down or conversion of capital instruments shall be effected in order of seniority, so that Common Equity Tier 1 instruments are to be written down first, then additional Tier 1 instruments are to be written down or converted to equity, followed by Tier 2 instruments. If the write-down or conversion of capital instruments is not sufficient to restore the financial health of the institution, the bail-in power held by the resolution authorities may be applied to write down or convert eligible liabilities, such as BPCE's senior non-preferred and senior preferred securities.

At December 31, 2022, total Tier 1 capital amounted to €69.7 billion and Tier 2 prudential capital to €12.7 billion. The senior non-preferred debt instruments amounted to €26.8 billion at that date, of which €22.5 billion had a maturity of more than one year and were therefore eligible for TLAC and MREL at December 31, 2022.

As a result of the complete legal solidarity, and in the extreme case of a liquidation or resolution proceeding, one or more affiliates may not find itself subject to court-ordered liquidation, or be affected by resolution measures within the meaning of the "BRRD", without all affiliates and BPCE also being affected. In accordance with Articles L. 613-29 and L. 613-5-5 of the French Monetary and Financial Code, the judicial liquidation proceedings and resolution measures are therefore brought in a coordinated manner with regard to the central institution and all of its affiliates.

Article L. 613-29 also provides that, in the event of court-ordered liquidation proceedings being brought against all affiliates, the external creditors (of the same rank or enjoying identical rights) of all affiliates would be treated equally according to the ranking of the creditors and regardless of whether they are attached to a particular affiliated entity. As a result, investors in AT1 instruments and other pari passu securities would be more affected than investors in Tier 2 instruments and other pari passu securities, which in turn would be more affected than investors in external senior non-preferred debt, which in turn would be more affected than investors in external senior preferred debt. Similarly, in the event of resolution, and in accordance with Article L. 613-55-5 of the French Monetary and Financial Code, identical depreciation and/or conversion rates would be applied to debts and receivables of the same rank, regardless of their attachment to a particular affiliated entity in the order of the hierarchy recalled above. Due to the systemic nature of Groupe BPCE and the assessment currently made by the resolution authorities, resolution measures would be more likely to be taken than the opening of judicial liquidation proceedings. A resolution procedure may be initiated against BPCE and all affiliated entities if (i) the default of BPCE and all affiliated entities is proven or foreseeable, (ii) there is no reasonable expectation that another measure could prevent this failure within a reasonable timeframe and (iii) a resolution measure is required to achieve the objectives of the resolution: (a) guarantee the continuity of critical functions, (b) avoid material adverse impacts to financial stability, (c) protect State resources by minimizing the use of exceptional public financial support and (d) protect client funds and assets, particularly those of depositors. Failure of an institution means that it does not respect requirements for continuing authorization, it is unable to pay its debts or other liabilities when they fall due, it requires extraordinary public financial support (subject to limited exceptions), or the value of its liabilities exceeds the value of its assets.

In addition to the bail-in power, resolution authorities are provided with broad powers to implement other resolution measures with respect to failing institutions or, under certain circumstances, their groups, which may include (without limitation): the total or partial sale of the institution's business to a third party or a bridge institution, the separation of assets, the replacement or substitution of the institution as obligor in respect of debt instruments, modifications to the terms of debt instruments (including altering the maturity and/or the amount of interest payable and/or imposing a temporary suspension on payments), discontinuing the listing and admission to trading of financial instruments, the dismissal of managers or the appointment of a temporary administrator (*administrateur spécial*) and the issuance of new equity or own funds.

The exercise of the powers described above by resolution authorities could result in the partial or total write-down or conversion to equity of the capital instruments and the debt instruments issued by BPCE, or may substantially affect the amount of resources available to BPCE to make payments on such instruments, potentially causing BPCE investors to incur losses.

Tax legislation and its application in France and in countries where Groupe BPCE operates are likely to have an adverse impact on Groupe BPCE's profits.

As a multinational banking group that carries out large and complex international transactions, Groupe BPCE (particularly Natixis) is subject to tax legislation in a large number of countries throughout the world, and structures its activity in compliance with applicable tax rules. Changes in tax schemes by the competent authorities in these countries could materially impact Groupe BPCE's profits. Groupe BPCE manages its activities with a view to creating value from the synergies and sales capabilities of its various constituent entities. It also works to structure financial products sold to its customers from a tax efficiency standpoint. The structure of intra-group transactions and financial products sold by entities of Groupe BPCE are based on its own interpretations of applicable tax regulations and laws, generally based on opinions given by independent tax experts, and, as needed, on decisions or specific interpretations by the competent tax authorities. It is possible that in the future tax authorities may challenge some of these interpretations, as a result of which the tax positions of Groupe BPCE entities may be disputed by the tax authorities, potentially resulting in tax re-assessments, which may in turn have an adverse impact on Groupe BPCE's results.

3

RISK MANAGEMENT SYSTEM

3.1 Adequacy of risk management systems

The Group Risk and Compliance Committee, chaired by the Chairman of the Management Board, met five times in 2022 to review the adequacy of Groupe BPCE's risk management systems, and validated the annual review of the Group's risk policies. These systems cover all risks, as described in the Ministerial Order of November 3, 2014 on internal control as amended by the Order of February 25, 2021.

The coverage of risks was found to be adequate, consistent with the risk appetite framework validated by the BPCE Management Board and Supervisory Board, and related closely to the Group's strategy and budget oversight.

3.2 Risk appetite

All risks are covered by central and local risk management systems, in line with the Group's risk appetite and strategy.

Groupe BPCE's Supervisory Board unanimously approved the Group's risk appetite framework: quantitative indicators, resilience threshold for each indicator and associated governance. During its annual review, the Supervisory Board examined the Group's risk appetite in December 2022 and its deliberation was unanimously approved.

Risk appetite guidelines

As a decentralized and united cooperative group, Groupe BPCE structures its activity around share capital, held predominantly by the regional institutions, and centralized market funding, optimizing the resources allocated to the entities.

Groupe BPCE:

- through its cooperative nature, is firmly committed to generating recurring and resilient income for its cooperative shareholders and investors by offering the best service to its customers;
- must preserve the solvency, liquidity and reputation of each Group entity – a duty assumed by the central institution through the oversight of consolidated risks, a risk policy and shared tools;
- consists of regional banks, which own the Group and its subsidiaries. In addition to normal management operations, in the event of a crisis, solidarity mechanisms between Group entities ensure the circulation of capital and prevent the entities or the central institution from defaulting;
- focuses on the structural risks of its full-service banking model, with a predominant retail banking component in France, while incorporating other business lines necessary to provide quality service to all of its customers;
- diversifies its exposures by developing certain activities in line with its strategic plan:
  - development of the Corporate & Investment Banking, bancassurance and asset management businesses,
  - international expansion (predominantly Corporate & Investment Banking and asset management, with a more targeted approach for retail banking customers).

Groupe BPCE's risk appetite is defined as the level of risk it is willing to accept with the goal of increasing its profitability while maintaining solvency. This risk appetite must be aligned with the institution's operating environment, strategy and business model, while making customer interests the top priority. In determining its risk appetite, Groupe BPCE aims to steer clear of any major pockets of concentration and to optimize capital allocation.

In terms of risk profile, Groupe BPCE incurs risks intrinsically associated with its retail banking and Corporate & Investment Banking activities. Changes to its business model are increasing the Group's exposure to some types of risks, particularly risks related to asset management and international businesses.

The Group does not conduct business unless it has the associated risks sufficiently under control, nor does it exercise proprietary trading activities. Activities with high risk-reward profiles are strictly controlled.

In all activities, entities and regions of operation, the Group undertakes to meet the highest standards of ethics, conduct, best execution and transaction security.

Risk appetite framework and groupwide implementation

The risk appetite framework is based on a master document providing a qualitative and quantitative description of the risks that Groupe BPCE is willing to assume, and describing the governance and operating guidelines in effect.

The implementation of the risk appetite framework is centered on four key components: (i) the definition of groupwide standards, (ii) the existence of a set of limits in line with those defined by regulations, (iii) the distribution of expertise and responsibilities between the entities and the central institution and (iv) the operation of the governance process within the Group and the different entities, enabling the efficient and resilient application of the risk appetite framework.

The Group's risk appetite framework is regularly updated (at least annually) and is centered on a series of successive limits associated with separate respective authorization levels, *i.e.*:

- an observation or tolerance threshold, which if breached, calls for BPCE Management Board members to decide either to require the breach to be corrected or to allow the transaction to go ahead on an exceptional basis;
- a RAF limit (risk appetite framework) or resilience threshold, the breach of which would pose a potential risk to the continuity and/or stability of the business. Any such breach must be reported to the BPCE Supervisory Board and addressed by a specific action plan validated by the Board;
- an extreme limit in conjunction with the Group's resolution and recovery plan which, if breached, could jeopardize the Group's very survival. This extreme limit concerns certain indicators adopted in respect of the Group's risk appetite.

A quarterly dashboard is prepared by the Group's Risk division, for the purpose of regularly and extensively monitoring all risk indicators and reporting to the supervisory body or/and any committee thereof.

The risk appetite framework is adapted by the entities for consistent groupwide implementation.

The Risk division issues an annual compliance notice to the institutions in their annual draft proposal, ensuring a high level of consistency between the risk appetites implemented locally and that of the Group.

Robust financial strength

Groupe BPCE enjoys high liquidity and solvency levels:

- in terms of solvency, the Group is able to absorb, if need be, the occurrence of a risk at entity or Group level;
- in terms of liquidity, the Group has a significant reserve consisting of cash and securities enabling it to meet regulatory requirements, pass stress tests and access central bank unconventional financing mechanisms. It also has a sufficient amount of high-quality liquid assets eligible for market funding mechanisms and those offered by the European Central Bank.

The Group ensures the robustness of this system by implementing global or dedicated stress tests such as those for climate risk management, which are carried out regularly. They are intended to verify the Group's resilience, particularly in the event of a serious crisis.

Summary of the Group's risk profile in 2022

The following risks are incurred by the Group because of its business model:

% OF RWAs

CREDIT AND COUNTERPARTY RISKS

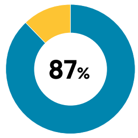
Credit risk, generated by the Group's predominant business (i.e. lending to individual and corporate customers), is governed by risk policies applied to all Group entities, concentration limits defined by counterparty, country and sector, and finally extensive oversight of loan books.

- RWAs: **€400bn** (+4.5% vs. 2021)
- These exposures are predominantly based on the internal model approach (60% of risk-weighted assets).

- Cost of risk: **€2bn** (+ 12% vs. 2021)
- Average annual cost of risk: **24 bp** (vs. 23 bp in 2021)
- NPL/gross loan outstandings: **2.3%**
- Coverage of NPL by provisions: **41.3%**

The loan book has a balanced risk profile

Gross exposures: **€1,484bn**, + 3.7% vs. 2021



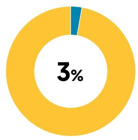
MARKET RISKS

Market risk indicators are monitored and analyzed at various position aggregation levels, giving an overview of total exposure and risk consumption by risk factor.

- RWAs: **€15bn** (+1.5% vs. 2021)
- **50%** of risk-weighted assets determined using the standardized approach

VaR and stress indicators held steady at low levels throughout 2022.

- VaR : **€10.3m**



STRUCTURAL ALM RISKS

Structural interest rate risk, associated in particular with fixed-rate home loans and regulated liabilities, is governed by groupwide standards and individual entity limits; liquidity risk is steered centrally by allocating budget-defined liquidity to round out customer deposits raised by the entities.

In 2022, liquidity was maintained at a **high level**, providing the Group with significant coverage of **stress scenarios**.

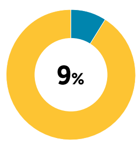
- Coverage of short-term funding by liquidity reserve: **150%**
- 12-month average LCR: **142%**

NON-FINANCIAL RISKS

Non-financial risks are non-compliance, fraud, information system security, reputational and misconduct risks, as well as other operational risks.

- Operational risk-weighted assets: **€41bn (+3.8%** vs. 2021)

- The main causes of operating losses are in the **"External Fraud" category in Basel (40%).**



Emerging risks

Groupe BPCE places great importance on anticipating and managing emerging risks in today's constantly changing environment. To this end, a prospective analysis identifying the risks that could impact the Group is carried out every six months and presented to the Risk and Compliance Committee, followed by the Board's Risk Committee.

The macroeconomic context has deteriorated sharply since the beginning of 2022 and has led to a more pessimistic view than what was projected in terms of the result generated by the Group's activities and the level of risk. In addition, the Covid crisis and the consequences of the crisis in Ukraine have profoundly changed the environment in which the Group's activities are carried out. They have greatly increased the intensity of the shocks caused by the various types of risk affecting our business lines.

The forthcoming slowdown in economic growth, combined with high and potentially long-term inflation, poses an increased risk of a deterioration in credit portfolios, in particular for certain customer segments with vulnerabilities (business sectors sensitive to the secondary effects of the war in Ukraine and/or inflation, customers with an already high level of debt, etc.).

The vigilance regarding interest rate and investment risks is also increased given the highly unfavorable impact that the rise in interest rates and inflation could have on the Group's profitability in the short and medium term.

The international geopolitical environment is an ongoing source of concern, with various geopolitical tensions continuing to weigh on general economic conditions and fueling uncertainties.

As the economy and financial services have grown increasingly digitized, banks have had to remain constantly vigilant against cyber threats. The sophistication of cyber attacks and potential vulnerability of their IS systems are both major risks for Groupe BPCE, in conjunction with the expectations of the regulatory authority.

The Group is very attentive to changes in the regulatory environment and to the supervisor's requests, in particular on new provisioning standards, the management and monitoring of leveraged loans, guidelines on non-performing loans, etc.

Climate change is an integral part of the risk management policy, with operational variations being rolled out.

Lastly, operational risks are receiving close attention, notably with the application of crisis management systems when necessary.

3.3 Risk management

Governance of risk management

Risk management is governed by two main bodies at Group level: the Supervisory Board, which is supported by the Board's Risk Committee, and the Executive Management Committee, of which the Head of Risk Management is a member.

Chaired by the Chairman of the Management Board, the Group Risk and Compliance Committee, an umbrella committee, sets the broad outlines of the risk policy and examines issues related to non-financial risks (specifically those related to banking, insurance and investment service compliance, and to financial security), annually reviews the risk appetite framework, and approves a prospective risk analysis twice a year.

Organization of risk management

Groupe BPCE's Risk division and General Secretariat – in charge of compliance and permanent control – measure, monitor and manage risks, pursuant to the Ministerial Order of November 3, 2014 as amended by the Order of February 25, 2021, on internal control.

They ensure that the risk management system is effective, complete and consistent, and that risk-taking is consistent with the guidelines for the business (particularly the targets and resources of the Group and its institutions).

These duties are formalized in Groupe BPCE's Internal Control Charter, an umbrella charter. It is based on the two charters of the control functions, namely the Internal Audit Charter and the Group Risk, Compliance and Permanent Control Charter.

The various departments of the Group Risk division are involved in all risks (credit, financial, operational, climate and non-banking investments) by acting on:

- the risk policy and the resulting standards;
- permanent monitoring and control;
- coordination.

The departments of the Group's Risk division:

Management	Monitoring	Control
• present the Management Board and Supervisory Board with a risk appetite framework for the Group and ensure its implementation and roll-out at each major entity; • help draw up risk policies on a consolidated basis, inform overall risk limits, contribute to discussions on capital allocation and ensure that portfolios are managed in accordance with these limits and allocations; • define and implement standards and methods for consolidated risk measurement, risk-taking approval, risk control and reporting, and compliance with risk regulations; • oversee the risk information system, working closely with the IS departments, while defining the standards to be applied for the measurement, control, reporting and management of risks; • are functionally subordinate to the risk and compliance functions, participating in the work of local Risk Committees or receiving the results of their work, coordinating the departments and approving the appointment or dismissal of all new Heads of Risk Management, Heads of Compliance, or Heads of Risk and Compliance meeting with the relevant managers and/or teams during national or local meetings and during checks on site or at BPCE; • help disseminate risk and compliance awareness and promote the sharing of best practices throughout the Group.	• carry out the annual macro-level risk mapping exercise, factoring in the overall risk policy, risk appetite and annual permanent control plan, which is part of the internal control system; • conduct permanent monitoring of limit breaches and their resolution, centralize risk data and prepare forward-looking risk reports on a consolidated basis; • help the Groupe BPCE Management Board to identify emerging risks, concentration of risk and other various developments, and to devise strategy and adjust risk appetite; • perform stress tests with the goal of identifying areas of risk and the Group's resilience under various predetermined shock scenarios.	• assess and control the level of risk across the Group; • conduct controls to ensure that the operations and internal procedures of Group companies comply with legal, professional, or internal standards applicable to banking, financial and Insurance activities; • implement a permanent second-level Group control system for the risks of the institutions and the sensitive activities of the Group Risk division.

SPECIAL COMMITTEES

Several committees are responsible for defining Groupwide methodology standards for measuring, managing, reporting and consolidating all risks throughout the Group.

Group Risk and Compliance Committee	• The Group Risk and Compliance Committee is a decision-making and supervisory committee. It is an umbrella committee for all the Group's risks, set up in accordance with regulatory provisions, in particular Articles 223 to 232 of the amended French Ministerial Order of November 3, 2014.
Group Counterparty and Credit Risk Committees	• Several types of committees have been established to manage credit risk for the entire Group, meeting at varying frequencies depending on their roles (*ex-post* or decision-making analysis) and their scope of authority.
Group Market Risk Committees	• The Group has also established decision-making and supervisory committees for both market and structural ALM risks. The frequency of their meetings is tailored to the needs of the Group and its institutions.
Non-Financial Risk Committee	• This committee meets quarterly and includes the various Groupe BPCE business lines affected by non-compliance and operational risks. It examines information system security, business continuity and accounting review issues. Its objective is to validate action plans targeting these risks, which are included in the Group's macro-level risk map. • It also performs consolidated supervision of losses, incidents and alerts, including reports made to the *Autorité de contrôle prudentiel et de résolution* (ACPR), the French prudential supervisory authority for the banking and insurance sector, under Article 98 of Ministerial Order A-2014-11-03 as amended by the Order of February 25, 2021, for non-financial risks.
ALM Committee	• The Asset and Liability Management Committee is a decision-making and supervisory committee for Asset/Liability management, interest rate risk and liquidity management.
Climate Risk Committee	• This umbrella committee on the Group's physical climate, transition, liability and environmental risks meets three times a year, in response, in particular, to the regulatory provisions of the ECB and the ACPR.
Model Risk Management Committee	• This committee proposes to the governance a resilient model risk management framework, making it possible to propose risk indicators and any associated thresholds to the bodies, to monitor the evolution of the portfolio of models, to ensure the proper dissemination of the model risk management framework within the Group.

Risk governance at Group institutions

The Group's Risk division and General Secretariat oversee the Group's risk management, compliance and permanent control functions, focusing on the management of credit, financial, operational, climate and non-compliance risks, extended to business continuity, financial control and information system security functions. They ensure that the risk policies of the affiliates and subsidiaries comply with those of Groupe BPCE.

The Risk and/or Compliance divisions of subsidiaries not subject to the banking supervision regulatory framework are functionally subordinate to Groupe BPCE's Risk division and General Secretariat.

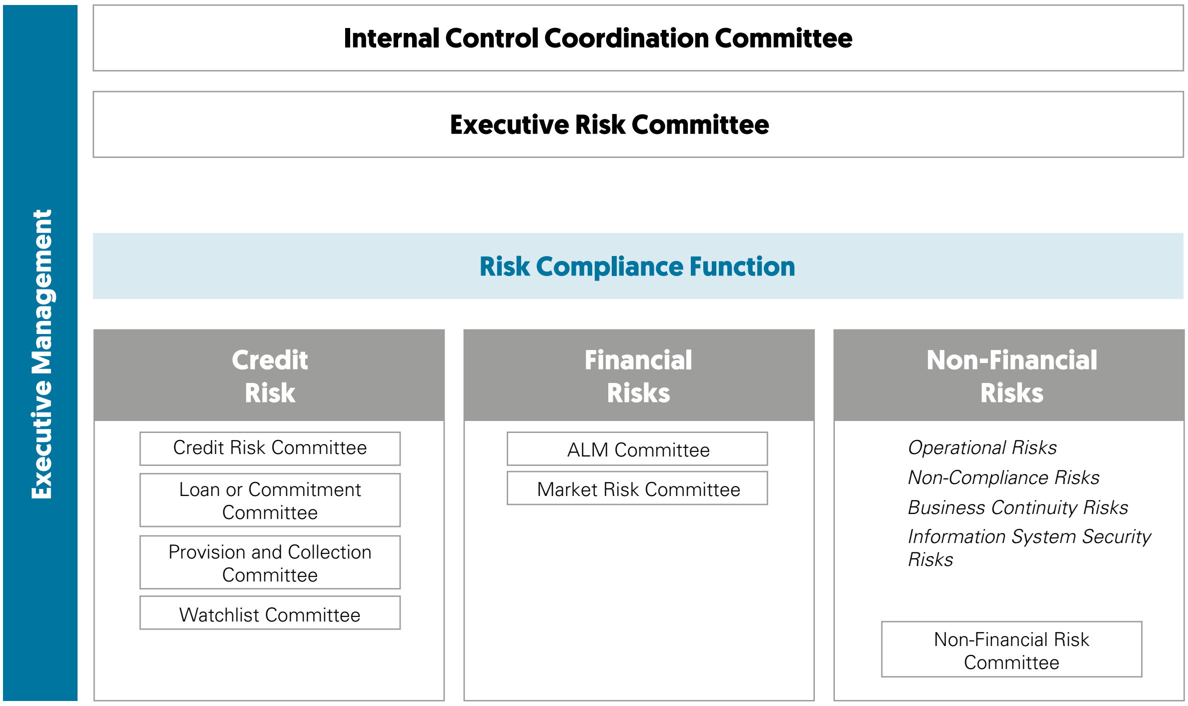
The strong functional authority is exercised by the Head of Risk Management and by the Secretary General, both members of Groupe BPCE's Executive Management Committee. It enables risk controls to be performed objectively, as each Group entity's operational functions are independent from its risk and compliance functions. It also promotes a risk management and compliance culture and the application of shared risk management standards, and ensures that managers are given independent, objective and detailed information on the Group's risk exposures and any possible deterioration in its risk profile.

Group institutions are responsible for defining, monitoring and managing their risk levels, as well as producing reports and data for submission to the central institution's Risk division and General Secretariat. They ensure the quality, reliability and completeness of the data used to control and monitor risks at the company level and on a consolidated basis, in line with Group risk standards and policies.

In the course of their work, the Group's institutions rely on the Group Risk, Compliance and Permanent Control Charter. The charter specifies that each institution's supervisory body and executive management promote the risk management culture at all levels of their organization.

A twofold assessment of a) risk management functions and b) compliance functions is conducted annually by the Risk Committee of the Groupe BPCE Supervisory Board and sent to the management of the Group's main establishments.

STANDARD RISK GOVERNANCE STRUCTURE AT A GROUP INSTITUTION



Risk Governance

ORGANIZATION

The Risk Governance and Control department is responsible for coordinating and leading the risk and compliance functions, in conjunction with the Corporate Secretary's office, and for the second level permanent control of the Risk function within Groupe BPCE. The Risk, Compliance and Permanent Control Charter calls for the Group Risk division and General Secretariat to participate, at their own initiative, in the annual performance assessment of the Heads of the Permanent Control functions, particularly risk and/or compliance, in consultation with the Chairman of the Management Board or the Chief Executive Officer.

The Risk Governance and Control department deploys the entire system on a daily basis and contributes to the overall supervision of Group risks, primarily through:

- oversight and updates of key risk and compliance function documents such as charters and standards;
- analysis of the work done by the Executive Committees on the risks incurred by the Banques Populaires, the Caisses d'Epargne and the subsidiaries;
- coordination of the risk management and compliance function events through a series of national Risk Management and Compliance Days, including discussions and exchanges on risk- and compliance-related issues, presentations on the work done by the functions, training and sharing of best practices in the credit, financial, operational, climate and compliance fields between all Group institutions. Risk Management and Compliance Days also provide opportunities to strengthen groupwide solidarity in the risk management and/or compliance professions in today's ever-changing regulatory environment. In addition, audio conferences and regional meetings are very frequently attended by the Heads of Risk Management and Compliance of the networks and subsidiaries to address current topics and events;
- second-level permanent control of Groupe BPCE's Risk function, as well as the sensitive activities of the Group's Risk division, *via* a dedicated department;
- a document library dedicated to the functions;
- measuring the level of risk and compliance culture in the Group's institutions *via* a dedicated self-assessment;
- the performance of operational efficiency work (effective benchmark standards), work related to the risk-based approach (half-yearly risk and compliance reporting, risk appetite framework, macro-mapping of risks, etc.);
- the follow-up of all recommendations issued by supervisors and by the General internal audit in the area of risk management and permanent control;
- a twofold assessment of a) the risk management functions and b) the compliance functions is conducted every year and presented to the Risk Committee of the Groupe BPCE Supervisory Board;
- managing the institutions' risk appetite framework: definition in line with the Group framework, consolidation and reporting to the bodies;
- support for new Heads of Risk Management and/or Compliance *via* a dedicated program and the annual training plan for the risk and compliance functions;

- frequent on-site meetings with the Heads of Risk Management and/or Compliance and teams of the Banques Populaires, Caisses d'Epargne and subsidiaries;
- in addition to the Operational Committee meetings attended by the Risk division, General Meetings held with each of the main BPCE subsidiaries: Global Financial Services (Natixis), Crédit Foncier, Banque Palatine, BPCE International (extinctive management), the subsidiaries of the Financial Solutions & Expertise division, and Oney for a comprehensive review with the Head of Risk Management and/or Compliance;
- distribution of a newsletter ("Mag R&C") to the heads of Group institutions, the heads of the various functions, including sales, and the employees of the risk, compliance and permanent control functions as well as all Group employees.

For coordination purposes, the Risk Governance and Control department relies on a half-yearly report drawn up by the institutions, aimed at ensuring that the various components of the local systems are properly implemented and operate under satisfactory conditions, particularly with respect to banking regulations and Group charters. The findings of this report improve operational efficiency and optimize best practices throughout the Group.

Activities specifically focused on the Lagarde report are being monitored in conjunction with the Group's institutions. There is also a system in place to monitor anomalies observed at Group institutions, aimed at ensuring that business is conducted properly and the rules of ethics are applied.

Lastly, a global transformation program for the Risk function and the Risk division was initiated in 2022 (called Triple A) in order to optimize and strengthen work in these areas. This program covers all risk areas, including IT and HR.

HIGHLIGHTS

- contribution to the Risk division's transformation projects;
- review of the risk appetite framework by integrating Leverage Finance and HCSF indicators;
- creation, in the fourth quarter of 2022, of a permanent risk control unit in the Group Risk division, in charge of the second-level permanent control of Groupe BPCE's Risk function, as well as the sensitive activities of the Group's Risk division;
- grouping of the risk and risk culture functions;
- implementation of a dashboard to monitor governance and risk control work;
- establishment of a project manager in charge of coordinating the regulatory watch of the risk perimeter.

Risk and compliance culture

To promote and strengthen the risk and compliance culture at all levels, the Risk and Compliance department of the Risk Governance department is focused on developing risk and compliance training and awareness programs at all Group levels, establishing regular communication on risk and compliance issues throughout the Group, and disseminating and measuring the risk and compliance culture.

Training	• *Risk & Compliance Academy*	37 training courses, including:
	• *Risk pursuit*	• a compliance program (for the risk, compliance and audit functions)
		• a specific program for the Inspection Générale division
		• a certification program dedicated to the Risk and Compliance departments set up in Paris Dauphine
		• Banking risk awareness quiz: 200 questions/4 topics (credit risks, financial risks, non-financial risks and banking environment risks) targeting the employees of the Banques Populaires, the Caisses d'Epargne and the subsidiaries
	• *Climate Risk Pursuit*	• Climate risk awareness quiz: 200 questions targeting the employees of the Banques Populaires, the Caisses d'Epargne and the subsidiaries
	• Members of the supervisory bodies and risk committees of the BPs and CEs	• Annual training provided for Fédération Nationale des Banques Populaires and Fédération Nationale des Caisses d'Epargne: risks, compliance and security
	• Member of the Board of BPCE SA	• Risk, compliance and IT security training
Communication	• The R&C Hour	• Topics intended for the Risk and Compliance departments of the Group's institutions and BPCE SA's employees (live + replay): Basel IV, crypto-assets (impacts in terms of risk management and compliance), ESG risks (overview, Pillar III publications and market challenges), real estate markets, economic news, feedback on climate stress tests.
	• Regulatory holiday book	• Examination of regulatory issues (regulatory outlook, response from regulators and supervisors on Covid-19, etc.)
	• Regulatory communication	• Coordination of the risk and compliance Chapters of the regulatory reports (universal registration document, Pillar III, annual report on internal control, ICAAP)
Sharing of best practices	• Sharing of best practices and cross-analyses between operational entities and control functions	• Coordination of Commitment managers of the BPs, CEs and subsidiaries
		• Risk assessment of sales functions at Group institutions (New Product Committee, implementation and updating of sales processes)
		• Sharing best practices by pooling local risk management systems
Measurement of the risk and compliance culture	• Self-assessment of the level of risk and compliance culture: R&C EVAL system	• 139 questions on the risk and compliance culture, based on the recommendations of the Financial Stability Board 2014, Agence Française Anticorruption 2017 and the European Banking Authority 2021 guidelines allowing a self-assessment and the implementation of action plans

Macro-level risk mapping of institutions

The macro-level risk map plays a central role in an institution's overall risk management system: by identifying and rating its risks, in particular through the evaluation of its risk management system, each institution in the Group has its own risk profile and priority risks. This risk-based approach serves to update the risk appetite and the permanent/periodic control plans of Group institutions on a yearly basis.

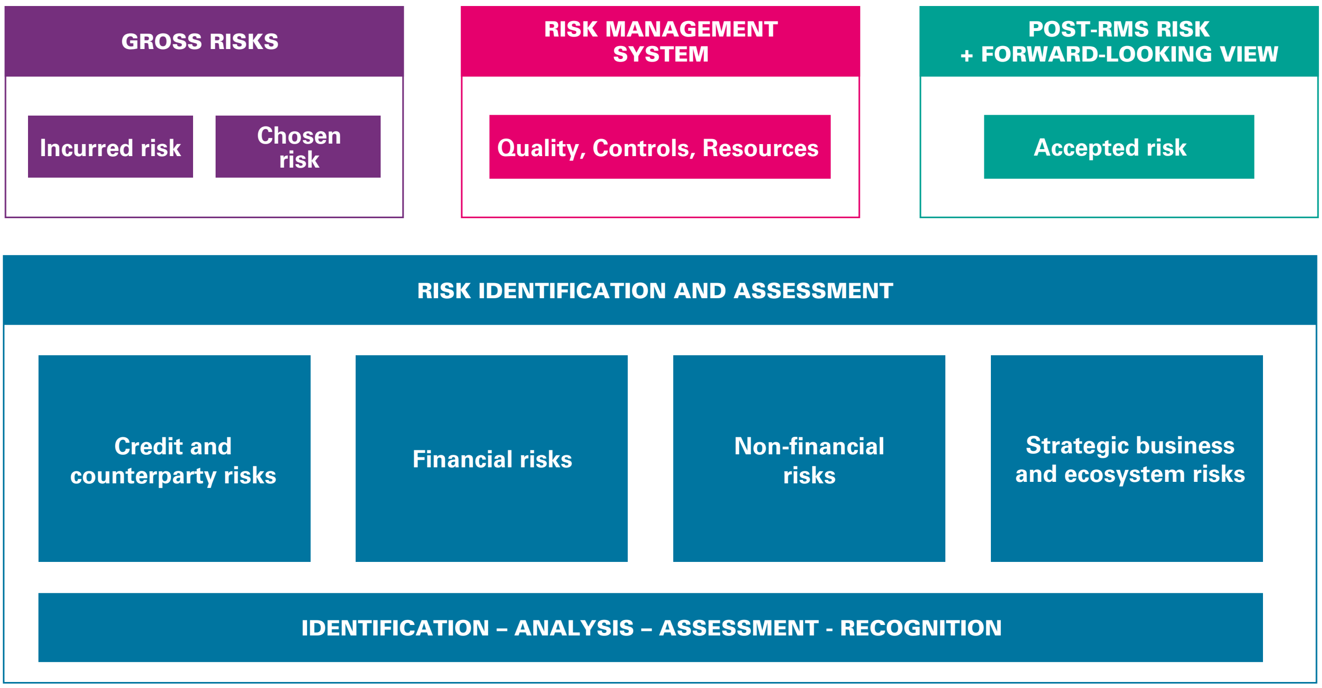
Action plans targeting high-priority risks are defined with the goal of reducing and/or managing risks.

The results of the macro-level risk mapping process contribute to the Group's Supervisory Review and Evaluation Process (SREP), by identifying the main risks under the risk management and prudential approach, included in the annual report on internal control, the ICAAP report and the universal registration document (risk factors section).

In 2022, as in previous years, a consolidation of the macro-level risk mapping was carried out for each network. Each institution is able to compare the results of its own macro-level risk mapping with those of its network. Action plans set up by the institutions to address their priority risks were also consolidated.

The macro-risk mapping is integrated into the Priscop permanent control management tool, which makes it possible to automate the risk-control links in the risk management system.

Macro-level risk mapping was performed at Group level in 2022 by consolidating the macro-level risk maps of the parent company institutions and subsidiaries.



Lastly, the Risk Governance and Control department is responsible for validating the Group's models outside Natixis and the General Secretariat (human resources and Budget) of the Group Risk division.

Consolidated risk oversight

ORGANIZATION

In addition to the risk supervision conducted both individually and by type of risk, Groupe BPCE's Risk division also performs consolidated monitoring of the Group's risks. A Group risk dashboard is produced quarterly. It contains a quarterly Group risk dashboard, which is used to monitor the risk appetite defined by the Group as well as for comprehensive monitoring of risks based on an analysis of the Group's risk profile in each area (mapping of risk-weighted assets, credit risks and counterparty risks – by customer segment –, market risks, structural ALM risks, non-financial risks and risks related to insurance businesses). In addition to the dashboard, a monthly flash report provides the Group with a more responsive and updated overview of Group risks.

The Group Risk division also conducts or coordinates cross-business risk analyses and specific stress tests on the Group's main portfolios or activities and, if needed, for the entities. It has also developed half-year forward-looking risk analyzes aimed at identifying economic risk factors (known and emerging; international, national and regional), circumstantial threats (regulations, etc.) and their potential impact on the Group. These forward-looking analyses are presented at meetings of the Group Supervisory Board's Risk Committee.

In addition, it carries out risk measurements on a portfolio basis. It reviews and validates risk models developed internally. Lastly, it contributes to efforts to define internal capital requirements as well as internal and external solvency stress tests aimed at measuring the Group's sensitivity to a series of risk factors and its resilience in the event of a severe shock, by determining impacts in terms of cost of risk and RWA.

Stress testing system

Groupe BPCE has been developing stress tests since 2011 that can be performed using the risk modules for Group strategic analysis purposes and regulatory purposes.

There are two types of stress tests:

- internal stress tests (including reverse stress tests);
- regulatory stress tests (including in particular the EBA's 2021 stress test published on July 30, 2021).

The governance of the Group's stress testing system is based on a comprehensive approach covering all Group entities, taking into consideration their specific characteristics, and covering **the following risks**:

- credit risk: change in cost of risk and risk-weighted assets;
- securitization portfolio and counterparty risk: change in impairment and risk-weighted assets;
- market risks: market shocks, change in securities portfolios and risk-weighted assets;
- operational risks;
- insurance risk.

Risks associated with sovereign exposures are addressed according to their accounting classification in market risk or credit risk.

Models are used for each risk category to determine the impacts of scenarios on the various income statement items and capital requirements.

The methodologies used to determine the projections are based on:

- the methodology stipulated by the ECB and the EBA for regulatory stress tests;
- internal methodologies adapted to the Group's business model, as part of the budget exercise and risk management.

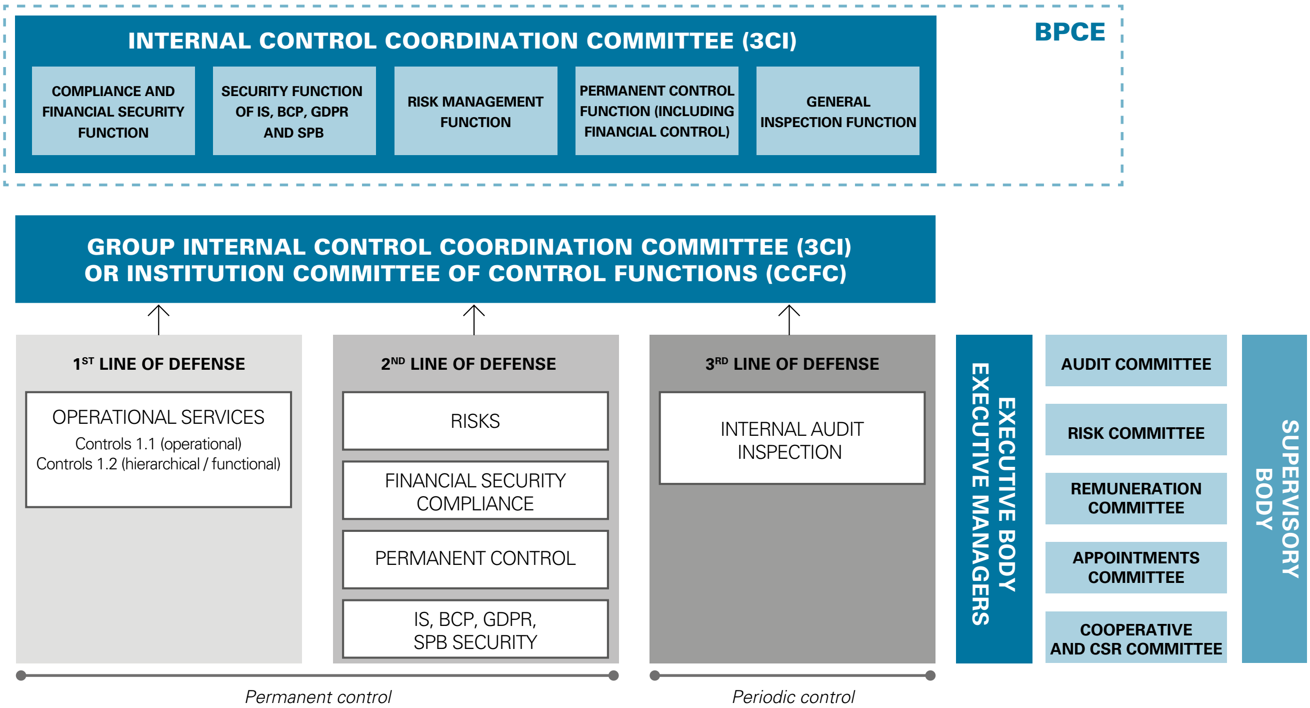
Several scenarios are tested in order to assess all impacts:

Baseline scenario	Baseline scenario comprising the budget scenario
ICAAP adverse scenarios	Scenarios that are both severe and plausible to provide relevant information on risk and resilience under the ICAAP.
Adverse Preventive Recovery Plan scenarios	Scenarios used as part of the Preventive Recovery Plan to assess the Group's ability to recover.
Reverse scenarios	Scenarios performed in advance of the stress scenarios to estimate ex ante the required severity for ICAAP and PPR.

3.4 Internal control

The Group control system relies on three levels of controls, in accordance with banking regulations and sound management practices (two levels of permanent controls and one level of periodic control), as well as the establishment of consolidated control processes in accordance with provisions approved by BPCE's Management Board.

STRUCTURE OF GROUPE BPCE'S INTERNAL CONTROL SYSTEM



Permanent control system

The organization of permanent control in the Group is specified in the Internal Control Charter (updated on July 23, 2020) in paragraph 3 and in the DRCCP Charter (updated on December 9, 2021) in paragraphs 2 and 5 in accordance with the Ministerial Order of November 3, 2014 (revised on February 25, 2021), in particular in Article 12.

In terms of governance, the assessment of the permanent control system is the responsibility of the Group Internal Control Coordination Committee (or 3CI or CCFC in its local implementation).

The permanent control system is based on the taxonomy of controls, which includes definitions of control methods.

The system comprises two types of level 1 controls (first line of defense LOD1) carried out by employees carrying out operational activities. These employees identify the risks associated with their activity and comply with the procedures and limits set:

- level 1.1 consists of production controls (detection of production anomalies, compliance with internal rules and procedures) usually carried out on an ongoing basis;
- level 1.2 consists of controls aimed at identifying risks/compliance with rules/procedures carried out by line managers (a line manager control implies a control distinct from the person who carried it out) or by a separate team dedicated to level 1 control. The formalization of procedures and operating modes describing the controlled operational activities are the responsibility of the first line of defense.

The system also includes two types of level 2 controls (second line of defense LOD2) performed by agents at the central and local levels:

- level 2.1 consists of controls aimed at verifying that the risks have been identified and managed by the first level of control in accordance with the rules and procedures provided for. They are carried out by employees of departments dedicated exclusively to risk management, compliance, security, permanent control or specialized functions that do not perform level 1 controls: These controls are formalized and assessed;
- level 2.2 concerns overall system controls or quality controls performed by each business line of an institution as the head of the Group or of BPCE as the central institution. These controls are formalized and assessed. In the last quarter of 2022, the Risk division set up a department dedicated to carrying out permanent controls of the Risk function and sensitive activities within its scope.

COORDINATION OF PERMANENT CONTROLS IN INSTITUTIONS

In accordance with the Group's Risk, Compliance and Permanent Control Charter, it is recommended that a permanent control coordination function be set up in each institution or Group head office covering the entire Risk/Compliance/Security area. In the absence of a dedicated department, these missions are the responsibility of the Head of Risk, Compliance and Permanent Control or the Chief Risk Officer and the Head of Compliance, it being understood that the designated Executive Officer remains responsible for the consistency and effectiveness of the control, within the meaning of the Ministerial Order of November 3, 2014 as amended by the Order of February 25, 2021.

COORDINATION OF PERMANENT CENTRAL CONTROLS

In the General Secretariat, the main role of the Group Coordination of Permanent Controls department is to coordinate the Group's level 1 and 2 permanent control system. In this context, it:

- proposes standards and methodological guides for the exercise of permanent control in Groupe BPCE;
- monitors the application of control standards, *i.e.* the framework document governing the Group's permanent control system – operational adaptation of the Internal Control Charter – and the control sampling standard, which is based on random, representative samples. To that end, all annual control plans of retail banking institutions are centralized and analyzed each year;
- assists the business lines in the review of controls and to ensure their risk coverage is complete. The various permanent control standards are overseen and constantly updated and expanded in the tool;
- performs consolidated reporting of control results for the Group Internal Control Committee;
- manages the system.

PERMANENT CONTROL CULTURE

The control culture has been strengthened by the implementation of a certification in permanent control of the banking and insurance business lines validated by the external body France Competence. This certification is intended for the level 1 and level 2 permanent control functions but also for the LOD2 functions.

HIGHLIGHTS

- The scope of the Group's control system has been extended to the BPCE Assurance and Payments entities. This group of entities joined the Priscop platform.
- Two new standards have been added to the system:

- the documentation standard of the Group's permanent controls, which covers the formalization of their expected results, the control methods and the information necessary for the controller in charge of carrying out the controls;

- the standard on the principles for reporting the results of controls in 3CI/CCFC.

- New reports have been developed to enable institutions to monitor the progress of the annual control plan
- a sharepoint has been implemented to assess, *via* a rating, the quality of an institution's permanent control system in relation to its priority risks;
- a review mission has been launched on the quality and completeness of the control documentation for the scope of controls common to all institutions, with the aim of uploading this documentation to the Priscop platform;
- the control framework proposed to institutions has been enriched, in particular with second-level controls.

Structure of integrated control functions

The Group Risk division and the Group General Secretariat are responsible for permanent controls at Group level, and the General internal audit for periodic control.

The permanent and periodic control functions of affiliates and subsidiaries, subject to banking supervision, are functionally subordinate, as Consolidated Control departments, to BPCE's corresponding Central Control divisions and report to their entity's executive body.

These ties have been formally defined in charters for each function, covering:

- a standardized opinion on the appointments and dismissals of Heads of permanent/periodic control functions at direct affiliates and subsidiaries;
- reporting, information and whistleblowing obligations;
- drafting of standard practices by the central institution set out in Group standards, definition or approval of control plans.

The entire system was approved by the Management Board on December 7, 2009, and presented to the Audit Committee on December 16, 2009 and to the BPCE Supervision Board. The Risk, Compliance and Permanent Control Charter was reviewed in December 2021 and the body of standards consists of three Group charters covering all activities:

The Group's Internal Control Charter is the umbrella charter. It is based on two specific charters:

- the Internal Audit Charter; and
- the Risk, Compliance and Permanent Control Charter.

Internal Control Coordination Committee

The Chairman of the BPCE Management Board is responsible for ensuring the consistency and effectiveness of the internal control system. A Group Internal Control Coordination Committee, chaired by the Chairman of the Management Board, meets periodically.

This committee is responsible for dealing with all issues relating to the consistency and effectiveness of the Group internal control system, as well as the results of risk management and internal control work and follow-up work.

The committee's main responsibilities include:

- validating the Group Internal Control Charter, the Group Risk, Compliance and Permanent Control Charter and the Group Internal Audit Charter;
- reviewing dashboards and reports on Group control results, and presenting permanent control coordination initiatives and results;
- validating action plans to be implemented in order to achieve a consistent and efficient Group permanent control system, and assessing progress made on corrective measures adopted subsequent to recommendations issued by the General internal audit , the national or European supervisory authorities, and the Permanent Control functions;
- reviewing the Group's internal control system, identifying any shortcomings, and suggesting appropriate solutions to further secure the institutions and the Group;
- presenting the results of institution controls or benchmarks;
- deciding on any cross-business initiatives or measures aimed at strengthening the Group's internal control system;
- ensuring consistency between measures taken to strengthen permanent control and risk areas identified during the consolidated macro-level risk mapping exercise.

The members of the Executive Management Committee in charge of Risk Management (Group Risk division) and of Compliance and Permanent Controls (General Secretariat), and the Head of the General internal audit , are members of this committee. Where applicable, the Internal Control Coordination Committee may hear reports from operational managers about measures they have taken to apply recommendations made by internal and external control bodies.

Periodic control (level 3)

ORGANIZATION AND ROLE OF THE GENERAL INTERNAL AUDIT

DUTIES

In accordance with the duties incumbent on the central institution, and pursuant to the rules of collective solidarity, the General internal audit is responsible for periodically verifying the operation of all Group institutions and providing their executive managers with reasonable assurance of their financial strength.

In that role, it ensures the quality, effectiveness, consistency and efficiency of their control system as well as their risk management. The division's scope of authority covers all risks, all institutions and all activities, including those that are outsourced.

Its top priorities are to assess and to report to the executive and decision-making bodies of the entities and the Group as a whole on:

- the adequacy of the entities' governance framework;
- the compliance with laws, regulations and rules by entities;
- the adequacy and compliance of policies and procedures with regard to the risk appetite of the entities;
- the effectiveness of the organization, particularly that of the first and second lines of defense;
- the quality of its financial position;
- the reliability and integrity of accounting and management information;
- the consistency, adequacy and operation of risk assessment and management systems;
- the integrity of the processes guaranteeing the reliability of the entities' methods and techniques, as well as the assumptions and information sources used for its internal models;

- the quality and use of risk detection and assessment tools and the measures taken to mitigate them;
- the security of information systems and their adequacy with regard to regulatory requirements;
- the control of essential critical or important services;
- the level of risks actually incurred;
- the quality of the business continuity system;
- the effective implementation of the recommendations made.

Reporting to the Chairman of the Management Board, the General internal audit performs its duties independently of the Operational and Permanent Control divisions.

REPRESENTATION ON GROUP GOVERNANCE BODIES AND RISK COMMITTEES

In the interest of exercising its duties and contributing effectively to the promotion of an auditing culture, the Head of the General internal audit takes part, without voting rights, in the central institution's key Risk Management Committees.

As indicated above, the Head of the General internal audit is a member of the Group Internal Control Coordination Committee and has a standing invitation to participate in the Supervisory Board's Risk Committee and the Audit Committee of BPCE, the Risk Committee and Audit Committee of Natixis, and the Risk Committee and Audit Committee of the Group's main subsidiaries (FSE division, Banque Palatine, Oney, Crédit Foncier, BPCE International).

SCOPE OF AUTHORITY

To fulfill its duties, the General internal audit establishes and maintains an inventory of the Group's auditing scope, which is defined in coordination with the Internal Audit departments of the Group institutions.

It makes sure that all institutions, activities and corresponding risks are covered by comprehensive audits, performed at frequencies defined according to the overall risk level of each institution or activity, which must not exceed five years for banking activities.

In so doing, the General internal audit takes into account not only its own audits, but also those conducted by the supervisory authorities and the Local internal audit.

The annual audit plan is defined with the Chairman of the BPCE Management Board, and presented to the Group Internal Control Coordination Committee and the Supervisory Board's Risk Committee. It is also transmitted to the national and European supervisors.

REPORTING

General internal audit audits contain recommendations prioritized by order of importance, which are regularly monitored (at least once every six months).

The division reports the findings of its work to the executive managers of the audited companies and to their supervisory body. It also reports to the Chairman of the Management Board, the Supervisory Board's Risk Committee and the Supervisory Board of BPCE. It provides them with a report on the implementation of its major recommendations, as well as those of the *Autorité de contrôle prudentiel et de résolution* (ACPR), the French prudential supervisory authority for the banking and insurance sector, and the Single Supervisory Mechanism (SSM).

It sees to the expedient execution of any corrective measures to the internal control system, in accordance with Article 26 of the amended Ministerial Order of November 3, 2014 on internal control, and may call on the Supervisory Board's Risk Committee to address any measures that have not been executed.

RELATIONS WITH THE PERMANENT CONTROL DIVISIONS OF THE CENTRAL INSTITUTION

In the central institution, the Head of the General internal audit maintains regular relations and shares information with the heads of the units in the scope of inspection, and more specifically with the divisions in charge of level 2 controls.

The heads of these divisions are responsible for notifying the Head of the General internal audit in a timely manner of any disruption or major incident that comes to their attention. The Head of the General internal audit and the Heads of Group Risk Management and Group Compliance and Security notify each other in a timely manner of any inspection or disciplinary procedure initiated by the supervisory authorities and in general of any external audits brought to their attention.

INSPECTION ACTIVITIES IN 2022

The completion of the 2022 audit plan was marked by the resumption of on-site missions and the continuation of the catch-up of international missions.

The General internal audit carried out 93% of its audit plan (compared to 82% in 2021), *i.e.* 71 of the 75 missions planned, including 6 additional ones added during the year.

The new organization of the function linked to the Pléiade project was put in place for the second wave of missions with the creation of the Natixis CIB Internal Audit department and the functional reporting of CIB, NIM, BPCE Assurances and Natixis Algérie audits to BPCE's Inspection Générale.

The whistleblowing system, revised in 2021 to support institutions/business lines in the convergence towards "0 late recommendations for all issuers combined", has been rolled out to institutions and has been stepped up by the General internal audit. It monitors the recommendations of the Supervisors on a quarterly basis and monitors the recommendations issued by itself every six months. It followed up on all the recommendations issued by the third line of defense on the Group (Internal Audits, Group Inspection Générale, former Natixis Inspection Générale and Supervisors) as of December 31, 2022.

AUDIT FUNCTION

STRUCTURE OF THE AUDIT FUNCTION

The General internal audit carries out its duties within the framework of business line operations. Its operating procedures - for the purposes of consolidated supervision and optimal use of resources - are set out in a charter approved by BPCE's Management Board on December 7, 2009; the latter was redesigned and approved on December 12, 2022.

The aim of this structure is to cover all of the Group's operational or functional units over a reasonable number of fiscal years, according to the associated risk, and to achieve efficiency between the various complementary audits conducted by the Internal Audits teams of Group entities.

The Local internal audit of the direct affiliates and subsidiaries are functionally subordinate to the General internal audit and report to the executive branch of their entity.

These ties are strictly replicated at the level of each company in the Group, which is itself a parent company.

This strong functional subordination is also based on operating rules and the Group Internal Audit Standards applicable by the entire function. It is reflected as follows:

- the existence of a single groupwide Audit Charter. It defines the end purpose, powers, responsibilities and general structure of the Internal Audit function in the overall internal control system, and applies to all Group companies supervised on a consolidated basis. This charter is implemented *via* thematic standards (audit resources, audit of the sales network, audit assignments, follow-up of recommendations, etc.);
- the appointment and dismissal of the Heads of Internal Audit of affiliates or direct subsidiaries are subject to the prior approval of the Head of the Groupe BPCE Inspection Générale division;
- the annual evaluations of the Heads are transmitted to the Head of the Group BPCE Inspection Générale division;
- the General internal audit ensures that each entity's Local internal audit holds the necessary resources to perform its duties and adequately cover the multi-year audit plan;
- the multi-year and annual audit programs carried out by the Local internal audit of the Group institutions are approved in conjunction with the General internal audit, which is kept regularly informed of their completion or of any change in scope;
- the General internal audit issues a formal letter of opinion and, where applicable, any reservations on the multi-year audit plan, the quality of work performed and the audit reports submitted to the General internal audit, and the resources allocated both in terms of number of employees and expertise;
- the Local internal audit applies the standards and methods defined and distributed by BPCE's General internal audit, and refers to the audit guides which are, as a matter of principle, common to all Internal Audit function auditors;
- in the course of conducting on-site audits, the BPCE's General internal audit periodically verifies that Group companies comply with the Group's Internal Audit standards;
- the 2022 changes to the charter mainly concern the reaffirmation of the strong link between local Internal Audits and the General internal audit, the independence of audit directors, the strengthening of audit work assessment systems and integration of the concept of CSR.

The following items are transmitted to the General internal audit:

- the Internal Audit reports of the Group institutions, as they are produced;
- copies of the annual reports of the entities prepared in accordance with Articles 258 to 264 of the amended Ministerial Order A-2014-11-03 on internal control;
- the presentations made by the Heads of Internal Audit to the Risk Committees, and the minutes of these meetings;
- the presentations made to the supervisory body on internal control activities and findings, and extracts of the minutes of the meetings where they were examined.

The rules governing oversight of the inspection function between Natixis and the central institution fall within the framework of the Group audit function.

WORK OF THE SUPPORT FUNCTIONS IN 2022

As a corollary of the Pléiade project to restructure Groupe BPCE's business lines, the widening of the scope of intervention of the Standards & Methods division continued in 2022 with a gradual ramp-up in areas other than Retail, in particular the activities of the new GFS division (Global Financial Services, formerly Natixis), continued monitoring of the recommendations in conjunction with supervisors, and participation in the work to revise the Internal Audit Charter mentioned above as well as the Missions standard (validated by BPCE's Executive Management Committee on October 25, 2022). The Missions standard now includes the assessment of the quality of data processing in the risk approach (through a data quality assessment and on the basis of the BCBS 239 principles). It also reaffirms the principle of maintaining the audit trail and the traceability of data processing.

In April 2022, the organization of the Data division was reviewed with a new manager and the arrival of new profiles such as a Data Engineer. The division's ambition is to strengthen its positioning within the Inspection department, to set up a robust data infrastructure using new tools, to facilitate the use of data for the benefit of the audit by accentuating its automation, and increase productivity. New data techniques have emerged in 2022 to increase the share of audit based on data analysis such as the exploration of the NLP (Natural Language Processing) for mass analysis of committee minutes.

The project owner's activity remained focused on the implementation of the new OMEGA audit mission management tool, replacing SAIG-RECO. The data migration was carried out correctly in October and the various modules (including the multi-year audit plans and the risk assessment of the Internal Audit departments of the institutions as well as the follow-up of recommendations) were put into production in accordance with the set workload plan.

3.5 Recovery Plan

BPCE's Supervisory Board approved the Group's Recovery Plan for 2022.

The plan is in line with European regulatory measures on the recovery and resolution of banks and investment firms, and with the provisions of the French Monetary and Financial Code.

The objective of the Recovery Plan is to identify measures to restore the Group's financial solidity in the event it deteriorates significantly.

The plan presents the options available to the Group to launch a crisis management system. It assesses the relevance of the different options in various crisis scenarios and the methods and resources available for their implementation.

The Recovery Plan is mainly based on the:

- Group's organizational structure and the specific implications of its cooperative status;
- identification of the Group's critical responsibilities;
- capital and liquidity management systems;
- analysis of financial crisis scenarios;
- identification of options impacting the restoration of the Group's financial position and their impacts on the Group's business model;
- preventative oversight of leading indicators on financial and economic conditions;
- establishment of the organizational structures needed to implement the recovery.

This system is monitored and coordinated by a permanent office at BPCE.

The Recovery Plan is kept up to date and approved by the Supervisory Board, aided by its Risk Committee for these purposes.

The Recovery Plan is updated annually on these various components (description of the Group, analysis of scenarios, analysis of the options available).

4

CAPITAL MANAGEMENT AND CAPITAL ADEQUACY

4.1 Regulatory framework

Credit institutions' capital is regularly monitored in accordance with regulations defined by the Basel Committee.

These regulations were reinforced following the introduction of Basel III, with an increase in the level of regulatory capital requirements and the introduction of new risk categories.

The Basel III recommendations were incorporated in EU directive 2013/36/EU (Capital Requirements Directive – CRD IV) and Regulation No. 575/2013 (Capital Requirements Regulation – CRR) of the European Parliament and of the Council amended by Regulation (EU) No. 2019/876 (the "CRR2"). As of January 1, 2014, all EU credit institutions are subject to compliance with the prudential requirements set out in these texts.

Credit institutions subject to CRD and CRR are thus required to continuously observe:

- the Common Equity Tier 1 (CET1) ratio;
- the Tier 1 ratio, *i.e.* CET1 plus Additional Tier 1 (AT1) capital;
- the total capital ratio, *i.e.* Tier 1 plus Tier 2 capital; and
- as of January 1, 2016, the capital buffers which can be used to absorb losses in the event of tensions.

  These buffers include:

  - a capital conservation buffer, comprised of Common Equity Tier 1, aimed at absorbing losses in times of serious economic stress,
  - a countercyclical buffer, aimed at protecting the banking sector from periods of excess aggregate credit growth. This Common Equity Tier 1 surcharge is supposed to be adjusted over time in order to increase capital requirements during periods in which credit growth exceeds its normal trend and to relax them during slowdown phases,
  - a systemic risk buffer for each Member State aimed at preventing and mitigating the systemic risks that are not covered by regulations (low for Groupe BPCE given its countries of operation),
  - the different systemic risk buffers aimed at reducing the risk of failure of systemically important financial institutions. These buffers are specific to each bank. Groupe BPCE is on the list of other systemically important institutions (O-SIIs) and global systemically important institutions (G-SIIs). As these buffers are not cumulative, the highest buffer applies.

  The capital ratios are equal in terms of the relationship between capital and the sum of:

- credit and dilution risk-weighted assets;
- capital requirements for the prudential supervision of market risk and operational risk, multiplied by 12.5.

Through December 31, 2019, these ratios were subject to a phase-in calculation aimed at gradually transitioning from Basel 2.5 to Basel III.

In 2022, Groupe BPCE is required to observe a minimum Common Equity Tier 1 ratio of 4.5% under Pillar I, a minimum Tier 1 capital ratio of 6% and, lastly, a minimum total capital ratio of 8%.

Alongside Pillar I minimum capital requirements, Groupe BPCE is subject to additional Tier 1 capital requirements:

- as of January 1, 2019, the Tier 1 capital conservation buffer is 2.5% of the total amount of risk exposures;
- Groupe BPCE's countercyclical buffer equals the EAD-weighted average of the buffers defined for each of the Group's countries of operation. Groupe BPCE's maximum countercyclical buffer as from January 1, 2019 is 2.5%. With the majority of Groupe BPCE's exposure being located in countries whose countercyclical buffer was set at zero, the Group considers that this rate will be very close to 0%;
- the G-SII buffer has been set at 1% for the Group;
- the systemic risk buffer is applied to all exposures located in the Member State setting this buffer and/or to sectoral exposures located in the same Member State. As most of Groupe BPCE's exposures are located in countries whose systemic risk buffer has been set at 0%, the Group considers that this rate will be very close to 0%.

Credit institutions must comply with the prudential requirements, which are based on three pillars that form an indivisible whole:

Pillar I

Pillar I sets minimum requirements for capital. It aims to ensure that banking institutions hold sufficient capital to provide a minimum level of coverage for their credit risk, market risk and operational risk. The bank can use standardized or advanced methods to calculate its capital requirement.

REVIEW OF MINIMUM CAPITAL REQUIREMENTS UNDER PILLAR I

	2021	2022
Minimum regulatory capital requirements		
Common Equity Tier 1 (CET1)	4.5%	4.5%
Total Tier 1 capital (T1 = CET1 + AT1)	6.0%	6.0%
Regulatory capital (T1 + T2)	8.0%	8.0%
Additional requirements		
Capital conservation buffer	2.5%	2.5%
G-SII buffer applicable to Groupe BPCE[1]	1.0%	1.0%
Maximum countercyclical buffer applicable to Groupe BPCE[2]	2.5%	2.5%
Maximum total capital requirements for Groupe BPCE		
Common Equity Tier 1 (CET1)	10.5%	10.5%
Total Tier 1 capital (T1 = CET1 + AT1)	12.0%	12.0%
Regulatory capital (T1 + T2)	14.0%	14.0%

(1) G-SII buffer: global systemic buffer.
(2) The countercyclical buffer requirement is calculated quarterly.

Pillar II

Pillar II establishes a process of prudential supervision that complements and strengthens Pillar I.

It consists of:

- an analysis by the bank of all of its risks, including those already covered by Pillar I;
- an estimate by the bank of the capital requirement for these risks;
- a comparison by the banking supervisor of its own analysis of the bank's risk profile with the analysis conducted by the bank, in order to adapt its choice of prudential measures where applicable, which may take the form of capital requirements exceeding the minimum requirements or any other appropriate technique.

For 2022, the total capital ratio in force for Groupe BPCE under Pillar II (P2R) is 10.00%, plus a 2.50% capital conservation buffer and a 1% global systemic buffer.

Pillar III

The purpose of Pillar III is to establish market discipline through a series of reporting requirements. These requirements – both qualitative and quantitative – are intended to improve financial transparency in the assessment of exposure to risks, risk assessment procedures and capital adequacy.

4.2 Scope of application

Regulatory scope

Groupe BPCE is required to submit consolidated regulatory reports to the European Central Bank (ECB), the supervisory authority for Euro zone banks. Pillar III is therefore prepared on a consolidated basis.

The regulatory scope of consolidation is established based on the statutory scope of consolidation. The main difference between these two scopes lies in the consolidation method for insurance companies, which are accounted for by the equity method within the regulatory scope, regardless of the statutory consolidation method.

The following insurance companies are accounted for by the equity method within the prudential scope of consolidation:

- Surassur;
- BPCE Assurances;
- Compagnie Européenne de Garanties et de Cautions;
- Prépar-Vie;
- Prépar-IARD;
- Oney Insurance;
- Oney Life.

The following insurance companies are accounted for by the equity method within both the statutory and regulatory scopes of consolidation:

- *Caisse de Garantie Immobilière du Bâtiment*;
- Parnasse Garanties.

In addition, since the second quarter of 2020, the Versailles entity is consolidated using the equity method. This change, which concerns only the regulatory scope, since the entity is still considered to be under control within the meaning of IFRS, follows a detailed analysis of the regulatory texts. The latter stipulate that non-financial entities that do not constitute ancillary services within the meaning of the standard are accounted for using the equity method for the purposes of reporting ratios. This decision, approved by the Group's bodies, allows for an alignment of the scopes used to calculate liquidity and solvency.

EU CC2 – TRANSITION FROM ACCOUNTING BALANCE SHEET TO PRUDENTIAL BALANCE SHEET

The table below shows the transition from an accounting balance sheet to a prudential balance sheet for Groupe BPCE at December 31, 2022.

The differences between the statutory and regulatory scopes of consolidation can be attributed to restatements for subsidiaries excluded from the regulatory scope of consolidation (see description of regulatory scope of consolidation below) and the reincorporation of intra-group transactions associated with these subsidiaries.

		12/31/2022		
		a	b	c
		Balance sheet in the published financial statements	According to the regulatory scope of consolidation	
in millions of euros		At end of period	At end of period	References
	ASSETS - BREAKDOWN BY ASSET CLASSES ACCORDING TO THE BALANCE SHEET IN THE PUBLISHED FINANCIAL STATEMENTS			
1	Cash and amounts due from central banks	171,318	171,381	
2	Financial assets at fair value through profit or loss	192,751	192,909	
3	• *o/w debt instruments*	*23,517*	*23,444*	
4	• *o/w equity instruments*	*34,515*	*34,515*	
5	• *o/w loans (excluding repurchase agreements)*	*6,917*	*6,917*	
6	• *o/w repurchase agreements*	*64,850*	*64,941*	
7	• *o/w trading derivatives*	*48,195*	*48,335*	
8	• *o/w security deposits paid*	*14,755*	*14,756*	
9	Hedging derivatives	12,700	12,700	
10	Financial assets at fair value through other comprehensive income	44,284	44,505	
11	Securities at amortized cost	27,650	27,741	
12	Loans and advances to banks at amortized cost	97,694	97,361	
13	Loans and advances to customers at amortized cost	826,953	826,535	

		12/31/2022		
		a	b	c
		Balance sheet in the published financial statements	According to the regulatory scope of consolidation	
in millions of euros		At end of period	At end of period	References
14	Revaluation differences on interest rate risk-hedged portfolios	(6,845)	(6,845)	
15	Insurance business investments	125,783	632	
16	Current tax assets	706	712	
17	Deferred tax assets	4,951	4,674	1
18	Accrued income and other assets	14,423	14,295	
19	Non-current assets held for sale	219	219	
20	Net participating benefit	4,752		
21	Investments accounted for using equity method	1,674	4,803	
22	Investment property	750	750	
23	Property, plant and equipment	6,077	6,071	
24	Intangible assets	1,087	930	2
25	Goodwill	4,207	4,156	2
	TOTAL ASSETS	**1,531,134**	**1,403,528**	
	LIABILITIES - BREAKDOWN BY LIABILITY CLASSES ACCORDING TO THE BALANCE SHEET IN THE PUBLISHED FINANCIAL STATEMENTS			
1	Central banks	9	9	
2	Financial liabilities at fair value through profit or loss	184,747	180,410	3
3	• *o/w securities sold short*	*22,892*	*22,892*	
4	• *o/w other liabilities issued for trading purposes*	*74,471*	*74,471*	
5	• *o/w trading derivatives*	*48,301*	*48,441*	
6	• *o/w security deposits received*	*10,174*	*10,254*	
7	• *o/w financial liabilities designated at fair value through profit or loss*	*28,909*	*24,352*	
8	Hedging derivatives	16,286	16,286	
9	Debt securities	243,373	242,624	
10	Amounts due to banks and similar	139,117	136,458	
11	Amounts due to customers	693,970	697,302	
12	Revaluation differences on interest rate risk-hedged portfolios	389	389	
13	Current tax liabilities	1,806	1,802	
14	Deferred tax liabilities	1,966	1,889	1
15	Accrued expenses and other liabilities	20,087	19,774	
16	Liabilities associated with non-current assets held for sale	162	162	
17	Liabilities related to insurance policies	122,831		
18	Provisions	4,901	4,856	
19	Subordinated debt	18,932	18,733	3
	TOTAL LIABILITIES	**1,448,576**	**1,320,695**	
1	Shareholders' equity			
2	Equity attributable to equity holders of the parent	82,079	82,075	4
3	*Share capital and additional paid-in capital*	*28,692*	*28,692*	
4	*Consolidated reserves*	*48,845*	*48,840*	
5	*Gains and losses recognized directly in other comprehensive income*	*591*	*592*	
6	*Net income for the period*	*3,951*	*3,951*	
7	Non-controlling interests	479	758	5
	TOTAL SHAREHOLDERS' EQUITY	**82,558**	**82,833**	

		12/31/2021		
		a	b	c
		Balance sheet in the published financial statements	According to the regulatory scope of consolidation	
in millions of euros		At end of period	At end of period	References
	ASSETS - BREAKDOWN BY ASSET CLASSES ACCORDING TO THE BALANCE SHEET IN THE PUBLISHED FINANCIAL STATEMENTS			
1	Cash and amounts due from central banks	186,317	186,460	
2	Financial assets at fair value through profit or loss	198,919	198,707	
3	• *o/w debt instruments*	*30,451*	*30,181*	
4	• *o/w equity instruments*	*47,617*	*47,617*	
5	• *o/w loans (excluding repurchase agreements)*	*7,497*	*7,497*	
6	• *o/w repurchase agreements*	*56,170*	*56,183*	
7	• *o/w trading derivatives*	*43,712*	*43,756*	
8	• *o/w security deposits paid*	*13,473*	*13,473*	
9	Hedging derivatives	7,163	7,163	
10	Financial assets at fair value through other comprehensive income	48,598	48,753	
11	Securities at amortized cost	24,986	24,982	
12	Loans and advances to banks at amortized cost	94,140	93,827	
13	Loans and advances to customers at amortized cost	781,097	781,825	
14	Revaluation differences on interest rate risk-hedged portfolios	5,394	5,394	
15	Insurance business investments	135,228	669	
16	Current tax assets	465	464	
17	Deferred tax assets	3,524	3,541	1
18	Accrued income and other assets	13,830	13,764	
19	Non-current assets held for sale	2,241	2,241	
20	Investments accounted for using equity method	1,525	5,378	
21	Investment property	758	758	
22	Property, plant and equipment	6,396	6,361	
23	Intangible assets	997	816	2
24	Goodwill	4,443	4,393	2
	TOTAL ASSETS	**1,516,021**	**1,385,495**	

		12/31/2021		
		a	b	c
		Balance sheet in the published financial statements	According to the regulatory scope of consolidation	
in millions of euros		At end of period	At end of period	References
	LIABILITIES - BREAKDOWN BY LIABILITY CLASSES ACCORDING TO THE BALANCE SHEET IN THE PUBLISHED FINANCIAL STATEMENTS			
1	Central banks	6	6	
2	Financial liabilities at fair value through profit or loss	191,768	189,303	3
3	• *o/w securities sold short*	*25,974*	*25,974*	
4	• *o/w other liabilities issued for trading purposes*	*86,424*	*86,424*	
5	• *o/w trading derivatives*	*40,434*	*40,457*	
6	• *o/w security deposits received*	*9,616*	*9,646*	
7	• *o/w financial liabilities designated at fair value through profit or loss*	*29,320*	*26,802*	
8	Hedging derivatives	12,521	12,521	
9	Debt securities	237,419	235,088	
10	Amounts due to banks and similar	155,391	152,020	
11	Amounts due to customers	665,317	668,421	
12	Revaluation differences on interest rate risk-hedged portfolios	184	184	
13	Current tax liabilities	1,313	1,299	
14	Deferred tax liabilities	1,049	838	1
15	Accrued expenses and other liabilities	20,115	19,956	
16	Liabilities associated with non-current assets held for sale	1,946	1,946	
17	Liabilities related to insurance policies	125,081		
18	Provisions	5,330	5,276	
19	Subordinated debt	18,990	18,786	3
	TOTAL LIABILITIES	**1,436,429**	**1,305,645**	
1	Shareholders' equity			
2	Equity attributable to equity holders of the parent	78,884	78,881	4
3	*Share capital and additional paid-in capital*	*28,240*	*28,240*	
4	*Consolidated reserves*	*45,126*	*45,119*	
5	*Gains and losses recognized directly in other comprehensive income*	*1,516*	*1,518*	
6	*Net income for the period*	*4,003*	*4,004*	
7	Non-controlling interests	707	969	5
	TOTAL SHAREHOLDERS' EQUITY	**79,591**	**79,850**	

4.3 Composition of regulatory capital

Regulatory capital

Regulatory capital is determined in accordance with Regulation No. 575/2013 of the European Parliament of June 26, 2013 on capital ("CRR") amended by Regulation (EU) No. 2019/876 ("CRR2").

It is divided into three categories: Common Equity Tier 1, Additional Tier 1 capital and Tier 2 capital. Deductions are made from these categories.

These categories are broken down according to decreasing degrees of solidity and stability, duration and degree of subordination.

BPCE 01 – REGULATORY CAPITAL

	12/31/2022 Basel III	12/31/2021 Basel III Phased-in[1]
Share capital and additional paid-in capital	28,692	28,240
Consolidated reserves	48,840	45,119
Net income for the period	3,951	4,004
Gains and losses recognized directly in other comprehensive income	592	1,518
Consolidated equity attributable to equity holders of the parent	**82,075**	**78,881**
Perpetual deeply subordinated notes classified as other comprehensive income	-	-
Consolidated equity attributable to equity holders of the parent excluding perpetual deeply subordinated notes classified as other comprehensive income	**82,075**	**78,881**
Non-controlling interests	164	193
• *o/w prudential filters*	-	-
Deductions	(5,994)	(4,825)
• *o/w goodwill[2]*	*(4,139)*	*(4,176)*
• *o/w intangible assets[2]*	*(792)*	*(649)*
• *o/w irrevocable payment commitments*	*(964)*	-
Prudential restatements	(6,580)	(4,485)
• *o/w shortfall of credit risk adjustments to expected losses*	*(189)*	*(203)*
• *o/w prudent valuation*	*(869)*	*(702)*
• *o/w insufficient coverage for non-performing exposures – Pillar II*	*(957)*	*(613)*
Common Equity Tier 1[3]	**69,665**	**69,764**
Additional Tier-1 capital	-	-
Tier 1 capital	**69,665**	**69,764**
Tier-2 capital	12,759	12,951
TOTAL REGULATORY CAPITAL	**82,424**	**82,715**

(1) Phased-in: after taking phase-in arrangements into account.
(2) Including non-current assets and entities held for sale classified as held for sale.
(3) The Common Equity Tier 1 included €28,723 million in cooperative shares (after taking allowances into account) on December 31, 2022 and €27,924 million in 2021.

A detailed breakdown of regulatory capital by category, as required by Implementing Regulation No. 1423/2013, is published at the following address: https://groupebpce.com/en/investors/results-and-publications/pillar-iii.

Details of debt instruments recognized as additional Tier 1 and Tier 2 capital, other instruments eligible for TLAC, as well as their characteristics, as required by Implementing Regulation No. 1423/2013 are published at https://groupebpce.com/en/investors/results-and-publications/pillar-iii.

Common Equity Tier 1 (CET1)

CORE CAPITAL AND DEDUCTIONS

Common Equity Tier 1 consists of:

- share capital;
- additional paid-in capital or merger premiums;
- reserves, including revaluation differences and gains or losses recognized directly in other comprehensive income;
- retained earnings;
- net income attributable to equity holders of the parent;
- non-controlling interests in banking or related subsidiaries for the share after CET1 eligibility caps.

The following deductions are made:

- treasury shares held and measured at their carrying amount;
- intangible assets (excluding the amount of prudently valued software, exempt from deduction) including start-up costs and goodwill;
- deferred tax assets and liabilities that rely on future profitability;
- prudential filters resulting from CRR Articles 32, 33, 34 and 35: gains or losses on cash flow hedges, gains on transactions in securitized assets, own credit risk;
- negative amounts arising from the comparison between provisions and expected losses (in this calculation, performing loans are clearly separated from loans in default);
- equity interests in eligible banking, financial and insurance institutions, according to the rules on allowances for these holdings and the phase-in period;
- value adjustments arising from the prudent valuation of assets and liabilities measured at fair value according to a prudential method, deducting any value adjustments;
- irrevocable payment commitments;
- defined benefit pension fund assets net of related deferred tax liabilities;
- insufficient hedging of non-performing exposures under Pillar I and Pillar II.

These deductions are supplemented by capital items that are not covered by CRR2.

BPCE 02 – CHANGES IN CET1 CAPITAL

in millions of euros	CET1 capital
12/31/2021	**69,764**
Cooperative share issues	793
Income net of proposed dividend payout	3,193
Other items(1)	(4,086)
12/31/2022	**69,665**

(1) Of which change in gains and losses recognized directly in other items of income not filtered -€970 million, and deduction of irrevocable payment commitments -€964 million

BPCE03 – BREAKDOWN OF NON-CONTROLLING INTERESTS (MINORITY INTERESTS)

in millions of euros	Non-controlling interests
CARRYING AMOUNT (REGULATORY SCOPE) – 12/31/2022	**758**
Perpetual deeply subordinated notes classified as non-controlling interests	-
Ineligible non-controlling interests	(543)
Proposed dividend payout	-
Caps on eligible non-controlling interests	(51)
Non-controlling interests (excluding other items)	**164**
Other items	-
PRUDENTIAL AMOUNT – 12/31/2022	**164**

Additional Tier 1 (AT1) capital

Additional Tier 1 capital includes:

- subordinated instruments issued in compliance with the restrictive eligibility criteria set forth by CRR Article 52;
- additional paid-in capital related to these instruments.

Deductions comprise equity interests in eligible banking, financial and insurance institutions, according to the rules on allowances for these holdings.

BPCE04 – CHANGE IN AT1 CAPITAL

in millions of euros	**AT1 capital**
12/31/2021	**-**
Redemptions	-
Issues	-
Foreign exchange effect	-
Other adjustments	-
12/31/2022	**-**

Tier 2 capital

Tier 2 capital consists of:

- subordinated instruments issued in compliance with the restrictive eligibility criteria set forth by CRR Article 63;
- additional paid-in capital related to Tier 2 items;
- the amount arising from provisions in excess of expected losses (in this calculation, performing loans are clearly separated from loans in default).

Deductions comprise equity interests in eligible banking, financial and insurance institutions, according to the rules on allowances for these holdings.

BPCE 05 – CHANGES IN TIER 2 CAPITAL

in millions of euros	**Tier-2 capital**
12/31/2021	**12,951**
Redemption of subordinated notes	(750)
Prudential haircut	(2,285)
New subordinated note issues	2,467
Phase-in deductions and adjustments	24
Foreign exchange effect	353
12/31/2022	**12,759**

4.4 Regulatory capital requirements and risk-weighted assets

In accordance with Regulation No. 575/2013 (CRR) of the European Parliament as amended by Regulation (EU) No. 2019/876 (the "CRR2"), credit risk exposures can be measured using two approaches:

- the "standardized" approach, based on external credit ratings and specific risk weightings according to Basel exposure classes;
- the "internal ratings based" (IRB) approach, based on the financial institution's internal ratings system, broken down into two categories:
  - the Foundation IRB approach – banks use only their probability of default estimates for this approach,
  - the Advanced IRB approach – banks use all their internal component estimates for this approach, *i.e.* probability of default, loss given default, exposure at default and maturity.

The methodology applied for IRB approaches is described in greater detail in Section 5 "Credit risk."

In addition to the requirements related to counterparty risk in market transactions, the regulation of June 26, 2013 provides for the calculation of an additional charge to hedge against the risk of loss associated with counterparty credit risk (CCR). Capital requirements for the Credit Valuation Adjustment (CVA) are determined using the Standardized Approach.

EU OV1 – OVERVIEW OF RISK-WEIGHTED ASSETS

The table below complies with the CRR format, presenting capital requirements for credit and counterparty risks, before the CVA and after the application of risk mitigation techniques.

		Risk-Weighted Assets		Total capital requirements
		a	b	c
in millions of euros		12/31/2022	12/31/2021	12/31/2022
1	**Credit risk (excluding CCR)**	**385,572**	**368,035**	**30,846**
2	o/w standardized approach	158,104	149,609	12,648
3	o/w simple IRB approach (F-IRB)	69,231	62,865	5,539
4	o/w referencing approach	82	40	7
EU 4a	o/w equities under the simple risk-weighted approach	33,602	36,372	2,688
5	o/w advanced IRB approach (A-IRB)	117,346	111,765	9,388
6	**Counterparty credit risk – CCR**	**14,182**	**14,399**	**1,135**
7	o/w standardized approach	2,808	3,468	225
8	o/w internal model method (IMM)	3,459	4,357	277
0	o/w mark-to-market	-	-	-
EU 8a	o/w exposures on a CCP	404	328	32
EU 8b	o/w credit valuation adjustment – CVA	2,911	2,536	233
9	o/w other CCRs	4,600	3,711	368
15	**Settlement risk**	**65**	**11**	**5**
16	**Securitization exposures in the banking book (after cap)**	**4,408**	**4,100**	**353**
17	o/w SEC-IRBA approach	506	387	40
18	o/w SEC-ERBA (including IAA)	1,559	1,781	125
19	o/w SEC-SA approach	2,108	1,596	169
EU 19a	o/w 1,250%/deduction	235	336	19
20	**Market risk**	**15,365**	**15,142**	**1,229**
21	o/w standardized approach	8,195	9,571	656
22	o/w internal models approach	7,170	5,571	574
EU 22a	**Large exposures**	**-**	**-**	**-**
23	**Operational risk**	**41,266**	**39,741**	**3,301**
EU 23a	o/w basic indicator approach	-	-	-
EU 23b	o/w standardized approach	41,266	39,741	3,301
EU 23c	o/w advanced measurement approach	-	-	-
24	**Amounts below the deduction thresholds (before weighting of risk of 250%)**	**5,354**	**5,258**	**428**
29	**TOTAL**	**460,858**	**441,428**	**36,869**

BPCE06 – RISK-WEIGHTED ASSETS BY TYPE OF RISK AND BUSINESS LINE

		Basel III				
in millions of euros		Credit risk[1]	CVA	Market risk	Operational risk	Total
	12/31/2021	282,824	56	1,563	25,377	309,821
Retail banking	**12/31/2022**	**302,549**	**87**	**1,256**	**26,499**	**330,391**
	12/31/2021	62,187	2,248	10,465	10,788	85,688
Global Financial Services	**12/31/2022**	**66,403**	**2,488**	**10,612**	**11,624**	**91,127**
	12/31/2021	38,998	231	3,114	3,576	45,919
Others	**12/31/2022**	**32,364**	**337**	**3,497**	**3,143**	**39,340**
TOTAL RISK-WEIGHTED ASSETS	**12/31/2021**	**384,009**	**2,536**	**15,142**	**39,741**	**441,428**
	12/31/2022	**401,316**	**2,911**	**15,365**	**41,266**	**460,858**

(1) Including settlement-delivery risk and other risk exposure amounts.

EU INS1 – NON-DEDUCTED PARTICIPATIONS IN INSURANCE UNDERTAKINGS

		12/31/2022	
		a	b
in millions of euros		Exposure value	Risk-weighted exposure
1	Equity instruments held in insurance or reinsurance companies or insurance holding companies not deducted from capital	2,567	9,498

		12/31/2021	
		a	b
in millions of euros		Exposure value	Risk-weighted exposure
1	Equity instruments held in insurance or reinsurance companies or insurance holding companies not deducted from capital	3,468	12,832

4.5 Management of Group capital adequacy

The methods used by Groupe BPCE to calculate risk-weighted assets are described in Section 4.4 "Regulatory capital requirements and risk-weighted assets."

Regulatory capital and capital ratios

BPCE07 – REGULATORY CAPITAL AND BASEL III PHASED-IN CAPITAL RATIOS

in millions of euros	12/31/2022 Basel III	12/31/2021 Basel III phased-in
Common Equity Tier 1 (CET1)	69,665	69,764
Additional Tier 1 (AT1) capital	-	-
TOTAL TIER 1 (T1) CAPITAL	**69,665**	**69,764**
Tier 2 (T2) capital	12,759	12,951
TOTAL REGULATORY CAPITAL	**82,424**	**82,715**
Credit risk exposure	401,251	383,998
Settlement/delivery risk exposure	65	11
CVA risk exposure	2,911	2,536
Market risk exposure	15,365	15,142
Operational risk exposure	41,266	39,741
TOTAL RISK EXPOSURE	**460,858**	**441,428**
Capital adequacy ratios		
Common Equity Tier-1 ratio	15.1%	15.8%
Tier-1 ratio	15.1%	15.8%
Total capital adequacy ratio	17.9%	18.7%

CHANGES IN GROUPE BPCE'S CAPITAL ADEQUACY IN 2022

The Common Equity Tier 1 ratio was 15.1% at December 31, 2022 *versus* 15.8% at December 31, 2021.

Several exceptional items impacted the Common Equity Tier 1 ratio in 2022:

- the decrease in OCI, mainly due to the increase in rates (-41 basis points);
- the regulatory obligation to re-deduct irrevocable payment commitments (-18 basis points).

The change in the Common Equity Tier 1 ratio in 2022 can also be attributed to:

- the growth in Common Equity Tier 1, driven in particular by retained earnings (+69 basis points) and the collection of cooperative shares (+17 basis points), but mitigated by the increase in the deduction for insufficient provisioning of non-performing loans (-9 basis points);
- the increase in risk-weighted assets related to the activity (-70 basis points).

At 15.1%, Groupe BPCE's Common Equity Tier 1 ratio on December 31, 2022 was also significantly higher than the minimum requirement defined by the European Central Bank (ECB) during the 2022 Supervisory Review and Evaluation Process (SREP). The total capital ratio stood at 17.9% on December 31, 2022, *i.e.* above the ECB's minimum requirement, compared to 18.7% on December 31, 2021.

GROUPE BPCE CAPITAL ADEQUACY MANAGEMENT POLICY

Capital and total loss absorbing capacity (TLAC) targets are determined according to Groupe BPCE's target ratings, in line with prudential constraints.

Capital adequacy management is therefore subject to a high management buffer which not only greatly exceeds prudential constraints on capital adequacy ratios, but is also well below the trigger for the Maximum Distributable Amount.

Capital and TLAC management is thus less sensitive to prudential changes (*e.g.* not dependent on G-SIB classification). As a result, the Group very predominantly builds its total loss absorbing capacity from CET1 and additionally from subordinated MREL-eligible and TLAC-eligible debt (mainly Tier 2 capital and senior non-preferred debt). The issues of these eligible debts are carried out by BPCE.

Finally, in addition to TLAC, Groupe BPCE carries bail-inable debt, the majority of which is accepted for the calculation of MREL: accordingly, senior preferred debt issued by BPCE is eligible for MREL, with Groupe BPCE leaving the possibility of meeting MREL requirements open, beyond its total loss absorbing capacity, with any bail-inable debt instrument.

The Single Resolution Board set the Group's MREL requirement in February 2022 (equivalent to 25.05% of the risk-weighted assets), which has now been met with room to spare. As a result, the Group does not need to modify or increase its issuance program.

With regard to the subordination constraint, Groupe BPCE complies with Articles 92a 1(a) and 494 of CRR Regulation No. 575/2013 providing for a requirement of 21.5% of RWA since 2022. The subordination requirement in the leverage base is set at 6.75% since 2022 pursuant to Article 92a 1(b) of the CRR.

CAPITAL ALLOCATION EQUITY AND SOLVENCY MANAGEMENT

The Group implemented action plans over the course of 2022 aimed specifically at ensuring the capital adequacy of its networks and its subsidiaries. BPCE thus subscribed to a Tier 2 issue by Banque Palatine for €25 million and CEGC for €150 million.

LEVERAGE RATIO

The entry into force of the Capital Requirements Regulation, known as CRR2, makes the leverage ratio a binding requirement as from June 28, 2021. The minimum requirement for this ratio to be met at all times is 3%.

This regulation authorizes certain exemptions in the calculation of exposures concerning regulated savings transferred to *Caisse des Dépôts et Consignations* for the totality of the centralized outstandings and Central Bank exposures for a limited period (pursuant to ECB decision 2021/27 of June 18, 2021).

This last exemption, in force until March 31, 2022, made it possible to avoid the impact of the increase in central bank assets that began at the time of the Covid-19 crisis. The reference date for the calculation of this adjusted requirement was set at December 31, 2019. At December 31, 2021, the Group's adjusted requirement amounted to: 3.23%.

The leverage ratio is not sensitive to risk factors and as such, it is considered as a measure that complements the solvency and liquidity management system, which already limits the size of the balance sheet. The leverage ratio is projected and managed at the same time as Groupe BPCE's solvency trajectory. The risk of excessive leverage is also measured in the internal stress test *via* the projection of the regulatory leverage ratio.

Groupe BPCE's leverage ratio, calculated according to the capital requirements regulation, known as CRR2, was 5.02% at December 31, 2022, based on phased-in Tier 1 capital.

EU LR1 – LRSUM – TRANSITION FROM BALANCE SHEET TO LEVERAGE EXPOSURE

		a	
		Applicable amount	
		12/31/2022	12/31/2021
1	**TOTAL ASSETS AS PER PUBLISHED FINANCIAL STATEMENTS**	**1,531,134**	**1,516,021**
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(127,606)	(130,526)
3	(Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference)	-	-
4	(Adjustment for temporary exemption of exposures to central bank (if applicable))	-	(172,768)
5	(Adjustment for fiduciary assets recognized on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with paragraph 1 of point (i) of Article 429a of CRR)	-	-
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	-	-
7	Adjustment for eligible cash pooling transactions	-	-
8	Adjustments for derivative financial instruments	(26,294)	(17,374)
9	Adjustment for securities financing transactions (SFTs)	8,997	7,766
10	Adjustment for off-balance sheet items (*i.e.* conversion to credit equivalent amounts of off-balance sheet exposures)	99,231	92,026
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	-	-
EU-11a	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with paragraph 1 of point (c) of Article 429a of the CRR)	(4,028)	-
EU-11b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with paragraph 1 of point (j) of Article 429a of the CRR)	(85,047)	(76,596)
12	Other adjustments	(7,707)	(5,693)
13	**TOTAL EXPOSURE MEASURE**	**1,388,681**	**1,212,857**

FINANCIAL CONGLOMERATE RATIO

As an institution exercising banking and Insurance activities, Groupe BPCE is also required to comply with a financial conglomerate ratio. This ratio is determined by comparing the financial conglomerate's total capital against all the regulatory capital requirements for its banking and insurance activities.

The financial conglomerate ratio demonstrates that the institution's prudential capital sufficiently covers the total regulatory capital requirements for its banking activities (in accordance with CRR2) and insurance sector activities, in accordance with the Solvency 2 regulation.

The calculation of surplus capital is based on the statutory scope. Insurance company capital requirements, determined for the banking capital adequacy ratio by weighting the equity-method value, are replaced with capital requirements based on the solvency margin. The capital requirements within the banking scope are determined by multiplying the risk-weighted assets by the applicable rate under Pillar II, *i.e.* 14.77% at December 31, 2022, compared to 14.26% at December 31, 2021.

On December 31, 2022, Groupe BPCE's surplus capital amounted to €16 billion.

Supervisory Review and Evaluation Process

SREP-ICAAP PROCESS

As the supervisory authority under Pillar II, the ECB conducts an annual assessment of banking institutions. This assessment, referred to as the Supervisory Review and Evaluation Process (SREP), is primarily based on:

- an evaluation based on information taken from prudential reports;
- documentation established by each banking institution, including in particular the Internal Capital Adequacy Assessment Process (ICAAP) and the Internal Liquidity Adequacy Assessment Process (ILAAP);
- an assessment of governance & risks, the business model, share capital and liquidity.

Based on the conclusions of the SREP carried out by the ECB in 2022, Groupe BPCE shall maintain a consolidated Common Equity Tier 1 ratio of 9.53% on January 1, 2023, including:

- 1.50% in respect of Pillar II requirements (excluding Pillar II guidance);
- 2.50% in respect of the capital conservation buffer;
- 1.00% in respect of the buffer for global systemically important banks (G-SIB buffer);
- 0.03% in respect of the countercyclical buffer.

The corresponding total capital requirement will be 13.53% (excluding Pillar II guidance).

- with a Common Equity Tier 1 ratio of 15.1% at the end of 2022, Groupe BPCE has exceeded the specific capital requirements set by the ECB;
- as regards the internal capital adequacy assessment under Pillar II, the principles defined in the ICAAP/ILAAP guidelines published by the ECB in February 2018 were applied in Groupe BPCE's ICAAP. The assessment is thus carried out using two different approaches:
  - a "normative" approach aimed at measuring the impact of internal stress tests within three years of the initial Pillar I regulatory position,
  - an "economic" approach aimed at identifying, quantifying and hedging risks using internal capital over the short-term (one year) and using internal methodologies. The methodologies developed by Groupe BPCE provide a better assessment of risks that are already covered under Pillar I, and also an additional assessment of risks that are not covered by Pillar I.

The results obtained using these two approaches confirmed the Group's financial soundness and no capital buffer is necessary in addition to the existing regulatory buffers.

Outlook

The objectives of the new 2021-2024 strategic plan are, with regard to the Common Equity Tier 1 ratio, to exceed 15.5%, and with regard to the subordinated MREL ratio (*i.e.* TLAC), to exceed 23.5%.

The Group remained on the list of G-SIBs (Global Systemically Important Banks) in November 2022.

MREL – TLAC

In addition to capital adequacy ratios, ratios aimed at verifying the Group's capacity to carry out a bail-in in the event of default are implemented *via* the Minimum Requirement for own funds and Eligible Liabilities (MREL) and Total Loss Absorbing Capacity. This second ratio is known as TLAC, according to the terminology of the Financial Stability Board, and in Europe it is defined in the BRRD directive and the CRR regulation as subordinated MREL. Groupe BPCE has established internal monitoring of these indicators.

The senior unsecured debt at more than one year and the Group's equity make up the numerator of the MREL ratio. The Group's current MREL requirement was received in February 2022.

The updated total MREL requirement was set at 25.05% of the Group's risk-weighted assets. The total MREL ratio reached 30.4% at December 31, 2022, compared with 31.1% at December 31, 2021.

For subordinated MREL, the numerator only includes junior liabilities through senior non-preferred debt because BPCE has renounced for the time being the use of a senior preferred debt allowance.

The TLAC ratio serves the same purpose as subordinated MREL and only applies to G-SIBs. CRR2, published at the same time as BRRD2, transcribed TLAC into positive law in the form of a minimum subordinated MREL requirement applicable to G-SIBs. As indicated above, the Group has set its own TLAC target above the regulatory requirement, which is 21.53% of RWAs in 2023, *i.e.* 18% plus the 3.53% solvency buffers.

TLAC (Total Loss Absorbing Capacity) amounted to €109.5 billion at the end of December 2022. The subordinated MREL ratio was 23.8% on December 31, 2022 compared to 24.8% on December 31, 2021.

4.6 Detailed quantitative disclosures

The detailed quantitative disclosures relating to capital management and capital requirements in the following tables enhance the information in the previous section under Pillar III.

EU LI3 – EXPLANATION OF DIFFERENCES BETWEEN THE STATUTORY AND PRUDENTIAL SCOPE OF CONSOLIDATION

All companies consolidated by the equity method are associates.

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	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
I- CONSOLIDATING ENTITY							
I-1 - Banque Populaire banks							
BANQUE POPULAIRE ALSACE LORRAINE CHAMPAGNE	FC	X					Credit institution
BANQUE POPULAIRE AQUITAINE CENTRE ATLANTIQUE	FC	X					Credit institution
BANQUE POPULAIRE AUVERGNE RHÔNE ALPES	FC	X					Credit institution
BANQUE POPULAIRE BOURGOGNE FRANCHE-COMTÉ	FC	X					Credit institution
BANQUE POPULAIRE DU NORD	FC	X					Credit institution
BANQUE POPULAIRE DU SUD	FC	X					Credit institution
BANQUE POPULAIRE GRAND OUEST	FC	X					Credit institution
BANQUE POPULAIRE MÉDITERRANÉE	FC	X					Credit institution
BANQUE POPULAIRE MÉDITERRANÉE MONACO BRANCH	FC	X					Credit institution
BANQUE POPULAIRE OCCITANE	FC	X					Credit institution
BANQUE POPULAIRE RIVES DE PARIS	FC	X					Credit institution
BANQUE POPULAIRE VAL DE FRANCE	FC	X					Credit institution
BRED - BANQUE POPULAIRE	FC	X					Credit institution
CASDEN - BANQUE POPULAIRE	FC	X					Credit institution
CRÉDIT COOPÉRATIF	FC	X					Credit institution
I-2 - Caisses d'Epargne							
CAISSE D'EPARGNE AQUITAINE POITOU-CHARENTES	FC	X					Credit institution
CAISSE D'EPARGNE BRETAGNE PAYS DE LOIRE	FC	X					Credit institution
CAISSE D'EPARGNE CÔTE D'AZUR	FC	X					Credit institution
CAISSE D'EPARGNE CÔTE D'AZUR, MONACO BRANCH	FC	X					Credit institution
CAISSE D'EPARGNE D'AUVERGNE ET DU LIMOUSIN	FC	X					Credit institution
CAISSE D'EPARGNE DE BOURGOGNE FRANCHE-COMTÉ	FC	X					Credit institution
CAISSE D'EPARGNE DE MIDI-PYRÉNÉES	FC	X					Credit institution
CAISSE D'EPARGNE HAUTS DE FRANCE	FC	X					Credit institution
CAISSE D'EPARGNE HAUTS DE FRANCE, BELGIUM BRANCH	FC	X					Credit institution
CAISSE D'EPARGNE ÎLE-DE-FRANCE	FC	X					Credit institution
CAISSE D'EPARGNE LANGUEDOC-ROUSSILLON	FC	X					Credit institution
CAISSE D'EPARGNE LOIRE-CENTRE	FC	X					Credit institution
CAISSE D'EPARGNE LOIRE DRÔME ARDÈCHE	FC	X					Credit institution

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
CAISSE D'EPARGNE GRAND EST EUROPE	FC	X					Credit institution
CAISSE D'EPARGNE NORMANDIE	FC	X					Credit institution
CAISSE D'EPARGNE PROVENCE-ALPES-CORSE	FC	X					Credit institution
CAISSE D'EPARGNE RHÔNE ALPES	FC	X					Credit institution
I-3 - BPCE SA							
BPCE SA	FC	X					Holding
I-4 - Mutual Guarantee Companies							
32 MUTUAL GUARANTEE COMPANIES	FC	X					Guarantee companies
I-5 - BP/CE/BPCE SA Multiple-Holder Fund							
II- "RELATED" INSTITUTIONS							
GEDEX DISTRIBUTION	NI	X					Financial company
SOCIÉTÉ FINANCIÈRE DE LA NEF	NI	X					Financial company
SOCOREC	NI	X					Financial company
SOFISCOP SUD EST	NI	X					Guarantee company
SOMUDIMEC	NI	X					Guarantee company
C.M.G.M.	NI	X					Guarantee company
EDEL	EQ	X					Credit institution
III- SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES							
III-1 - Banque Populaire subsidiaries							
ACLEDA	EQ			X			Credit institution
ADRAXTRA CAPITAL	FC	X					Private equity
AURORA	EQ			X			Holding
BANQUE CALÉDONIENNE D'INVESTISSEMENT	EQ			X			Credit institution
BANQUE DE SAVOIE	FC	X					Credit institution
BANQUE DE TRANSITION ÉNERGETIQUE	FC	X					Financial investment advisory services
BANQUE FRANCO LAO	FC	X					Credit institution
BCEL	EQ			X			Credit institution
BCI MER ROUGE	FC	X					Credit institution
BCP LUXEMBOURG	FC	X					Credit institution
BIC BRED	FC	X					Credit institution
BIC BRED (Suisse) SA	FC	X					Credit institution
BP DÉVELOPPEMENT	FC	X					Private equity
BPA ATOUTS PARTICIPATIONS	FC	X					Private equity
BRED BANK CAMBODIA PLC	FC	X					Financial company
BRED BANK FIJI LTD	FC	X					Credit institution
BRED COFILEASE	FC	X					Equipment leasing
BRED GESTION	FC	X					Credit institution
BRED IT	FC	X					IT services
BRED SALOMON ISLAND	FC	X					Credit institution
BRED VANUATU	FC	X					Credit institution
BTP BANQUE	FC	X					Credit institution
BTP CAPITAL CONSEIL	FC	X					Financial investment advisory services
BTP CAPITAL INVESTISSEMENT	FC	X					Private equity
CADEC	EQ			X			Private equity

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
CAISSE DE GARANTIE IMMOBILIÈRE DU BÂTIMENT	EQ			X			Insurance
COFEG	FC	X					Consulting
COFIBRED	FC	X					Holding
COOPEST	EQ			X			Private equity
COOPMED	EQ			X			Private equity
CREPONORD	FC	X					Equipment and real estate leasing
ECOFI INVESTISSEMENT	FC	X					Portfolio management
EPBF	FC	X					Payment institution
ESFIN	EQ			X			Private equity
ESFIN GESTION	FC	X					Portfolio management
EURO CAPITAL	FC	X					Private equity
FCC ELIDE	FC	X					French securitization fund (FCT)
FINANCIÈRE DE LA BP OCCITANE	FC	X					Holding
FINANCIÈRE IMMOBILIÈRE DERUELLE	FC	X					Real estate investment
FONCIÈRE BFCA	FC	X					Real estate investment
FONCIÈRE DU VANUATU	FC	X					Real estate development/management, real estate investment
FONCIÈRE VICTOR HUGO	FC	X					Holding
GARIBALDI CAPITAL DÉVELOPPEMENT	FC	X					Private equity
GARIBALDI PIERRE	FC	X					Real estate operations
GESSINORD	FC	X					Real estate operations
GROUPEMENT DE FAIT	FC	X					Services company
I-BP INVESTISSEMENT	FC	X					Real estate operations
IMMOCARSO SNC	FC	X					Investment property
INGEPAR	FC	X					Financial investment advisory services
INFORMATIQUE BANQUES POPULAIRES	FC	X					IT services
IRR INVEST	FC	X					Private equity
MULTICROISSANCE SAS	FC	X					Portfolio management
NAXICAP RENDEMENT 2018	FC	X					Private equity
NAXICAP RENDEMENT 2022	FC	X					Private equity
NAXICAP RENDEMENT 2024	FC	X					Private equity
NJR INVEST	FC	X					Private equity
OUEST CROISSANCE SCR	FC	X					Private equity
PARNASSE GARANTIES	EQ			X			Insurance
PARTICIPATIONS BP ACA	FC	X					Holding
PERSPECTIVES ENTREPRISES	FC	X					Holding
PLUSEXPANSION	FC	X					Holding
PRÉPAR COURTAGE	FC	X					Insurance brokerage
PRÉPAR-IARD	FC			X			Non-life insurance
PRÉPAR-VIE	FC			X			Life insurance and endowment
PROMÉPAR GESTION	FC	X					Portfolio management
RIVES CROISSANCE	FC	X					Holding

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
SAS ALPES DÉVELOPPEMENT DURABLE INVESTISSEMENT	FC	X					Private equity
SAS GARIBALDI PARTICIPATIONS	FC	X					Real estate operations
SAS SOCIÉTÉ IMMOBILIÈRE DE LA RÉGION RHÔNE ALPES	FC	X					Real estate operations
SAS SUD CROISSANCE	FC	X					Private equity
SAS TASTA	FC	X					Services company
SASU BFC CROISSANCE	FC	X					Private equity
SAVOISIENNE	FC	X					Holding
SBE	FC	X					Credit institution
SCI BPSO	FC	X					Real estate operations
SCI BPSO BASTIDE	FC	X					Real estate operations
SCI BPSO MÉRIGNAC 4 CHEMINS	FC	X					Real estate operations
SCI BPSO TALENCE	FC	X					Real estate operations
SCI CREDITMAR IMMOBILIER	FC	X					Real estate operations
SCI DU CRÉDIT COOPÉRATIF DE SAINT-DENIS	FC	X					Real estate operations
SCI FAIDHERBE	FC	X					Real estate operations
SCI POLARIS	FC	X					Real estate operations
SCI PYTHÉAS PRADO 1	FC	X					Real estate operations
SCI PYTHÉAS PRADO 2	FC	X					Real estate operations
SCI SAINT-DENIS	FC	X					Real estate operations
SEGIMLOR	FC	X					Real estate operations
SI ÉQUINOXE	FC	X					Holding
SIPMÉA	FC	X					Real estate development/management, real estate investment
SOCIÉTÉ CENTRALE DU CRÉDIT MARITIME MUTUEL	FC	X					Services company
SOCIÉTÉ D'EXPANSION BOURGOGNE FRANCHE-COMTÉ	FC	X					Holding
SOCIÉTÉ IMMOBILIÈRE PROVENÇALE ET CORSE	FC	X					Holding
SOCREDO	EQ			X			Credit institution
SOFIAG	FC	X					Financial company
SOFIDER	FC	X					Financial company
SPIG	FC	X					Property leasing
SUD PARTICIPATIONS IMMOBILIÈRES (formerly SAS FINANCIÈRE IMMOBILIÈRE 15)	FC	X					Housing real estate development
TISE	FC	X					Private equity
TRANSIMMO	FC	X					Real estate agent
UNION DES SOCIÉTÉS DU CRÉDIT COOPÉRATIF (GIE)	FC	X					Services company
VAL DE FRANCE IMMO	FC	X					Real estate operations
VAL DE FRANCE TRANSACTIONS	FC	X					Services company
VIALINK	FC	X					Data processing
III-2 - Caisses d'Epargne subsidiaries							
SAS 42 DERUELLE	FC	X					Real estate operations
AFOPEA	FC	X					Real estate operations
BANQUE BCP SAS	FC	X					Credit institution
BANQUE DE NOUVELLE-CALÉDONIE	FC	X					Credit institution

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
BANQUE DE TAHITI	FC	X					Credit institution
BANQUE DU LÉMAN	FC	X					Credit institution
BATIMAP	FC	X					Equipment leasing
BATIMUR	FC	X					Equipment leasing
BATIROC BRETAGNE PAYS DE LOIRE	FC	X					Equipment and real estate leasing
BDR IMMO 1	FC	X					Real estate operations
BEAULIEU IMMO	FC	X					Real estate operations
BRETAGNE PARTICIPATIONS	FC	X					Private equity
CAPITOLE FINANCE	FC	X					Equipment leasing
CE DÉVELOPPEMENT	FC	X					Private equity
CE DÉVELOPPEMENT II	FC	X					Private equity
CEBIM	FC	X					Holding
CEPAC FONCIÈRE	FC	X					Real estate operations
CEPAC INVESTISSEMENT ET DÉVELOPPEMENT	FC	X					Private equity
CEPRAL	FC	X					Investments in real estate development
COZYNERGY HOLDING	FC	X					Fund management
COZYNERGY SAS	FC	X					Engineering and technical studies
ENR-CE	FC	X					French securitization fund (FCT)
FCP MIDI PYRENEES PLACEMENT	FC	X					Investment funds
FERIA PAULMY	FC	X					Real estate operations
FONCEA	FC	X					Real estate operations
GIE CE SYNDICATION RISQUES	FC	X					Guarantee company
IMMOCEAL	FC	X					Investment property
INCITY	FC	X					Real estate operations
IT-CE	FC	X					IT services
MIDI FONCIÈRE	FC	X					Real estate operations
PHILAE SAS	FC	X					Real estate operations
SA CEPAIM	FC	X					Real estate operations
SAS FONCIÈRE DES CAISSES D'EPARGNE	FC	X					Investment property
SAS FONCIÈRE ECUREUIL II	FC	X					Investment property
SAS LOIRE CENTRE IMMO	FC	X					Real estate investment
SAS NSAVADE	FC	X					Investment property
SC RESIDENCE ÎLOT J	EQ			X			Real estate operations
SC RESIDENCE JEAN MERMOZ	EQ			X			Real estate operations
SC RESIDENCE LATECOERE	EQ			X			Real estate operations
SC RESIDENCE LE CARRE DES PIONNIERS	EQ			X			Real estate operations
SC RESIDENCE LES AILES D'ICARE	EQ			X			Real estate operations
SC RESIDENCE SAINT EXUPÉRY	EQ			X			Real estate operations
SCI 339 ÉTATS UNIS	FC	X					Real estate operations
SCI ADOUR SERVICES COMMUNS	FC	X					Real estate operations
SCI AVENUE WILLY BRANDT	FC	X					Real estate operations
SCI BLEU RÉSIDENCE LORMONT	FC	X					Real estate operations
SCI CRISTAL IMMO	FC	X					Real estate operations
SCI DANS LA VILLE	FC	X					Real estate operations

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
SCI DU RIOU	FC	X					Real estate operations
SCI EUROTERTIA IMMO	FC	X					Real estate operations
SCI FONCIÈRE 1	FC	X					Investment property
SCI G 102	FC	X					Real estate operations
SCI G IMMO	FC	X					Real estate operations
SCI GARIBALDI OFFICE	FC	X					Real estate operations
SCI L APOUTICAYRE LOGEMENT	FC	X					Real estate operations
SCI LA FAYETTE BUREAUX	FC	X					Investment property
SCI LABEGE LAKE H1	FC	X					Real estate operations
SCI LANGLADE SERVICES COMMUNS	FC	X					Real estate operations
SCI LE CIEL	FC	X					Real estate operations
SCI LE RELAIS	FC	X					Real estate operations
SCI LEVISEO	FC	X					Real estate operations
SCI LOIRE CENTRE MONTESPAN	FC	X					Real estate operations
SCI MIDI - COMMERCES	FC	X					Real estate operations
SCI MIDI MIXT	FC	X					Real estate operations
SCI MONTAUDRAN PLS	FC	X					Real estate operations
SCI MURET ACTIVITES	FC	X					Real estate operations
SCI ROISSY COLONNADIA	FC	X					Real estate operations
SCI SHAKE HDF	FC	X					Real estate operations
SCI TETRIS	FC	X					Real estate operations
SCI TOURNON	FC	X					Real estate operations
SNC ECUREUIL 5 RUE MASSERAN	FC	X					Investment property
SOCIÉTÉ HAVRAISE CALÉDONIENNE	FC	X					Real estate operations
SODERO PARTICIPATIONS	FC	X					Private equity
SPPICAV AEW FONCIÈRE ECUREUIL	FC	X					Real estate operations
III-3 - BPCE subsidiaries							
ALBIANT-IT	FC	X					IT systems and software consulting
BANCO PRIMUS	FC	X					Credit institution
BANCO PRIMUS Spain	FC	X					Credit institution
BATILEASE	FC	X					Real estate leasing
BPCE ACHATS	FC	X					Services company
BPCE BAIL	FC	X					Real estate leasing
BPCE CAR LEASE	FC	X					Long-term vehicle leasing
BPCE ENERGECO	FC	X					Equipment leasing
BPCE EXPERTISE IMMOBILIER (formerly CRÉDIT FONCIER EXPERTISE)	FC	X					Real estate valuation
BPCE FACTOR	FC	X					Factoring
BPCE FINANCEMENT	FC	X					Consumer credit
BPCE INFOGÉRANCE ET TECHNOLOGIE	FC	X					IT services
BPCE LEASE	FC	X					Equipment leasing
BPCE LEASE IMMO	FC	X					Real estate leasing
BPCE LEASE MADRID – Branch	FC	X					Equipment and real estate leasing
BPCE LEASE MILAN – Branch	FC	X					Equipment and real estate leasing
BPCE LEASE NOUMÉA	FC	X					Equipment leasing

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
BPCE LEASE RÉUNION	FC	X					Equipment leasing
BPCE LEASE TAHITI	FC	X					Equipment leasing
BPCE SERVICES	FC	X					Holding company activities
BPCE SOLUTIONS INFORMATIQUE	FC	X					IT systems and software consulting
BPCE PERSONAL CAR LEASE	FC	X					Long-term vehicle leasing
BPCE SERVICES FINANCIERS (formerly CSF-GCE)	FC	X					Services company
BPCE SFH	FC	X					Funding
BPCE SOLUTIONS CLIENTS (formerly BPCE SOLUTIONS CRÉDIT)	FC	X					Services company
BPCE SOLUTIONS IMMOBILIÈRES (formerly CRÉDIT FONCIER IMMOBILIER)	FC	X					Real estate operations
CICOBAIL SA	FC	X					Real estate leasing
CO ASSUR CONSEIL ASSURANCE SA (BROKERAGE)	FC	X					Insurance brokerage advisory
COMPAGNIE EUROPÉENNE DE GARANTIES ET DE CAUTIONS	FC			X			Insurance
FONDS DE GARANTIE ET DE SOLIDARITÉ BPCE - FONDS DELESSERT	FC	X					Mutual guarantee fund
FIDOR BANK AG	FC	X					Digital loan institution
GCE PARTICIPATIONS	FC	X					Holding
INTER-COOP SA	FC	X					Real estate leasing
LEASE EXPANSION SA	FC	X					IT operational leasing
MAISON FRANCE CONFORT PROU INVESTISSEMENTS	EQ			X			Real estate development
MIDT FACTORING A/S	FC	X					Factoring
MIFCOS	FC	X					Investment property
PRAMEX INTERNATIONAL	FC	X					International development and consulting services
PRAMEX INTERNATIONAL AP LTD – HONG KONG	FC	X					International development and consulting services
PRAMEX INTERNATIONAL AU CASABLANCA	FC	X					International development and consulting services
PRAMEX INTERNATIONAL CO LTD – SHANGHAI	FC	X					International development and consulting services
PRAMEX INTERNATIONAL CONSULTING PRIVATE LTD – MUMBAI	FC	X					International development and consulting services
PRAMEX INTERNATIONAL CORP – NEW YORK	FC	X					International development and consulting services
PRAMEX INTERNATIONAL DO BRAZIL CONSULTARIA LTDA – SAO PAULO	FC	X					International development and consulting services
PRAMEX INTERNATIONAL GmbH – FRANKFURT	FC	X					International development and consulting services
PRAMEX INTERNATIONAL LTD – LONDON	FC	X					International development and consulting services
PRAMEX INTERNATIONAL PTE LTD – SINGAPORE	FC	X					International development and consulting services
PRAMEX INTERNATIONAL SRL – MILAN	FC	X					International development and consulting services
PRAMEX INTERNATIONAL SA – MADRID	FC	X					International development and consulting services

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
PRAMEX INTERNATIONAL SARL – TUNIS	FC	X					International development and consulting services
PRAMEX INTERNATIONAL SP. ZOO – WARSAW	FC	X					International development and consulting services
SOCFIM	FC	X					Credit institution
SOCFIM PARTICIPATIONS IMMOBILIÈRES	FC	X					Holding
SOCRAM BANQUE	EQ			X			Credit institution
SPORTS & IMAGINE	FC	X					Services company
Sud-Ouest Bail	FC	X					Real estate leasing
SURASSUR	FC			X			Reinsurance
ONEY group							
ONEY BANK	FC	X					Holding
FLANDRE INVESTMENT SAS	FC	X					Credit institution, electronic payment systems, new technologies and holding company
ONEY SERVICIOS FINANCIEROS EFC SAU (SPAIN)	FC	X					Brokerage
BA FINANS (RUSSIA)	FC	X					Brokerage, financial institution
ONEY PENZFORGALMI SZOLGALTATO KFT.	FC	X					Financial institution
ONEY MAGYARORSZAG ZRT	FC	X					Financial institution
GEFIRUS SAS	FC	X					Credit institution, electronic payment systems, new technologies and holding company
IN CONFIDENCE INSURANCE SAS	FC	X					Credit institution, electronic payment systems, new technologies and holding company
ONEY HOLDING LIMITED (MALTA)	FC	X					Holding
ONEY LIFE (PCC) LIMITED (MALTA)	FC			X			Insurance
ONEY INSURANCE (PCC) LIMITED (MALTA)	FC			X			Insurance
ONEY POLSKA	FC	X					Intermediation Financial institution
ONEY SERVICES SP ZOO	FC	X					Intermediation Financial institution
ONEY FINANCES (ROMANIA)	FC	X					Brokerage
SMARTNEY	FC	X					Brokerage, financial institution
ONEY (Portugal branch)	FC	X					Brokerage
ONEYTRUST SAS	FC	X					Credit institution, electronic payment systems, new technologies and holding company
ONEY SPA (ITALY)	FC	X					Brokerage
ONEY UKRAINE (UKRAINE)	FC	X					Brokerage
ONEY GmbH	FC	X					Services, business development consulting
Groupe BPCE International							
BPCE INTERNATIONAL	FC	X					Specialized credit institution

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
BPCE INTERNATIONAL HO CHI MINH CITY (Vietnam Branch)	FC	X					Specialized credit institution
BPCE MAROC	FC	X					Real estate development
FRANSA BANK	EQ			X			Credit institution
OCÉORANE	FC	X					Financial investment advisory services
Crédit Foncier group							
CFG COMPTOIR FINANCIER DE GARANTIE	FC	X					Guarantee company
COFIMAB	FC	X					Real estate agent
COMPAGNIE DE FINANCEMENT FONCIER	FC	X					Financial company
CRÉDIT FONCIER DE FRANCE	FC	X					Credit institution
CRÉDIT FONCIER DE FRANCE (BELGIUM BRANCH)	FC	X					Credit institution
FONCIER PARTICIPATIONS	FC	X					Holding
FONCIÈRE D'ÉVREUX	FC	X					Real estate operations
GRAMAT BALARD	FC	X					Real estate operations
SOCIÉTÉ D'INVESTISSEMENT ET DE PARTICIPATION IMMOBILIÈRE (SIPARI)	FC	X					Holding
Banque Palatine Group							
ARIES ASSURANCES	FC	X					Insurance brokerage
BANQUE PALATINE	FC	X					Credit institution
CONSERVATEUR FINANCE	EQ			X			Fund management
PALATINE ASSET MANAGEMENT	FC	X					Asset Management
Global Financial Services division							
NATIXIS PFANDBRIEFBANK AG	FC	X					Credit institution
Azure Capital Holdings Pty Ltd	FC	X					M&A advisory services
The Azure Capital Trust	FC	X					Holding
Azure Capital Limited	FC	X					Holding
NATIXIS AUSTRALIA PTY Ltd	FC	X					Financial institution
Saudi Arabia Investment Company	FC	X					Financial institution
NATIXIS BELGIQUE INVESTISSEMENTS	FC	X					Investment company
EDF INVESTISSEMENT GROUPE	EQ			X			Investment company
Vermilion (Beijing) Advisory Company Limited	FC	X					M&A advisory services
Natixis Partners Iberia, SA	FC	X					M&A advisory services
NATIXIS NORTH AMERICA LLC	FC	X					Holding
Solomon Partners, LP (formerly Peter J. Solomon Company LP)	FC	X					M&A advisory services
Solomon Partners Securities Company LLC (formerly Peter J. Solomon Securities Company LLC)	FC	X					Brokerage
NATIXIS FUNDING CORP	FC	X					Other financial company
VERSAILLES	FC			X			Securitization vehicle
NATIXIS SECURITIES AMERICAS LLC	FC	X					Brokerage
NATIXIS FINANCIAL PRODUCTS LLC	FC	X					Derivatives transactions
NATIXIS REAL ESTATE HOLDINGS LLC	FC	X					Real estate finance
NATIXIS REAL ESTATE CAPITAL LLC	FC	X					Real estate finance
CM REO HOLDINGS TRUST	FC	X					Secondary markets finance
CM REO TRUST	FC	X					Secondary markets finance

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
MSR TRUST	FC	X					Real estate finance
NATIXIS US MTN PROGRAM LLC	FC	X					Issuing vehicle
NATIXIS SA	FC	X					Credit institution
NATIXIS IMMO DEVELOPPEMENT	FC	X					Housing real estate development
CONTANGO TRADING SA	FC	X					Brokerage company
NATIXIS PARTNERS	FC	X					M&A advisory services
SPG	FC	X					Mutual fund
NATIXIS MARCO	FC	X					Investment company - (extension of activity)
NATIXIS INNOV	FC	X					Holding
INVESTIMA 77	FC	X					Holding
NATIXIS ALTERNATIVE HOLDING LIMITED	FC	X					Holding
FENCHURCH PARTNERS LLP	FC	X					M&A advisory services
VERMILION PARTNERS (UK) LIMITED	FC	X					Holding
VERMILION PARTNERS LLP	FC	X					M&A advisory services
NATIXIS ASIA LTD	FC	X					Other financial company
NATIXIS HOLDINGS (HONG KONG) LIMITED	FC	X					Holding
VERMILION PARTNERS (HOLDINGS) LIMITED	FC	X					Holding
VERMILION PARTNERS LIMITED	FC	X					Holding
NATIXIS GLOBAL SERVICES (INDIA) PRIVATE LIMITED	FC	X					Operational support
BLEACHERS FINANCE	FC	X					Securitization vehicle
DF EFG3 LIMITED	FC	X					Holding
NATIXIS JAPAN SECURITIES CO, Ltd	FC	X					Financial institution
NATIXIS STRUCTURED PRODUCTS LTD	FC	X					Issuing vehicle
NATIXIS TRUST	FC	X					Holding
NATIXIS REAL ESTATE FEEDER SARL	FC	X					Investment company
NATIXIS ALTERNATIVE ASSETS	FC	X					Holding
NATIXIS STRUCTURED ISSUANCE	FC	X					Issuing vehicle
NATIXIS BANK JSC, MOSCOW	FC	X					Banking
NATIXIS ZWEIGNIEDERLASSUNG DEUTSCHLAND-Branch	FC	X					Financial institution
NATIXIS CANADA-Branch	FC	X					Financial institution
NATIXIS SHANGHAI-Branch	FC	X					Financial institution
NATIXIS BEIJING-Branch	FC	X					Financial institution
NATIXIS DUBAI-Branch	FC	X					Financial institution
NATIXIS NEW YORK-Branch	FC	X					Financial institution
NATIXIS MADRID-Branch	FC	X					Financial institution
NATIXIS LONDON-Branch	FC	X					Financial institution
NATIXIS HONG KONG-Branch	FC	X					Financial institution
NATIXIS MILAN-Branch	FC	X					Financial institution
NATIXIS TOKYO-Branch	FC	X					Financial institution
NATIXIS LABUAN-Branch	FC	X					Financial institution
NATIXIS PORTO-Branch	FC	X					Financial institution
Natixis Seoul-Branch	FC	X					Financial institution
NATIXIS SINGAPORE-Branch	FC	X					Financial institution
NATIXIS TAIWAN-Branch	FC	X					Financial institution

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
NATIXIS COFICINE	FC	X					Finance company (audiovisual)
AEW Invest GmbH	FC	X					Distribution
Natixis Investment Managers Australia Pty Limited	FC	X					Distribution
Investors Mutual Limited	FC	X					Asset management
AEW Australia Pty Ltd	FC	X					Asset management
Natixis IM Canada Holdings Ltd	FC	X					Holding
Natixis Investment Managers Korea Limited	FC	X					Distribution
AEW Korea LLC	FC	X					Asset management
Natixis IM Korea Limited (NIMKL)	FC	X					Distribution
AEW CAPITAL MANAGEMENT, INC.	FC	X					Asset management
AEW CAPITAL MANAGEMENT, LP	FC	X					Asset management
AEW PARTNERS V, INC.	FC	X					Asset management
AEW PARTNERS VI, INC.	FC	X					Asset management
AEW PARTNERS VII, INC.	FC	X					Asset management
AEW SENIOR HOUSING INVESTORS II INC	FC	X					Asset management
AEW Partners X GP, LLC	FC	X					Asset management
AEW Value Investors Asia II GP Limited	FC	X					Asset management
AEW Partners Real Estate Fund VIII, LLC	FC	X					Asset management
AEW Senior Housing Investors III LLC	FC	X					Asset management
Aew Senior Housing Investors IV LLC	FC	X					Asset management
AEW Partners Real Estate Fund IX, LLC	FC	X					Asset management
AEW Cold Ops MM, LLC	FC	X					Asset management
AEW EHF GP, LLC	FC	X					Asset management
AEW Core Property (US) GP, LLC	FC	X					Asset management
Seaport Strategic Property Program I Co-Investors, LLC	FC	X					Asset management
ALPHASIMPLEX GROUP LLC	FC	X					Asset management
AURORA INVESTMENT MANAGEMENT LLC	FC	X					Asset management
CASPIAN CAPITAL MANAGEMENT, LLC	FC	X					Asset management
EPI SLP LLC	FC	X					Asset management
EPI SO SLP LLC	FC	X					Asset management
GATEWAY INVESTMENT ADVISERS, LLC	FC	X					Asset management
HARRIS ALTERNATIVES HOLDING INC	FC	X					Holding
HARRIS ASSOCIATES LP	FC	X					Asset management
HARRIS ASSOCIATES SECURITIES, LP	FC	X					Distribution
HARRIS ASSOCIATES, INC.	FC	X					Asset management
LOOMIS SAYLES & COMPANY, INC.	FC	X					Asset management
LOOMIS SAYLES & COMPANY, LP	FC	X					Asset management
LOOMIS SAYLES ALPHA, LLC.	FC	X					Asset management
LOOMIS SAYLES DISTRIBUTORS, INC.	FC	X					Distribution
LOOMIS SAYLES DISTRIBUTORS, LP	FC	X					Distribution
LOOMIS SAYLES TRUST COMPANY, LLC	FC	X					Asset management
Ostrum AM US LLC	FC	X					Asset management
NATIXIS ASG HOLDINGS, INC	FC	X					Distribution
Flexstone Partners LLC	FC	X					Asset management
Natixis Investment Managers, LLC	FC	X					Holding

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
Natixis Advisors, LLC (formerly Natixis Advisors, LP)	FC	X					Distribution
Natixis Distribution, LLC (formerly Natixis Distribution, LP)	FC	X					Distribution
NATIXIS INVESTMENT MANAGERS INTERNATIONAL, LLC	FC	X					Distribution
NIM-os, LLC	FC	X					Media and digital
VAUGHAN NELSON INVESTMENT MANAGEMENT, INC.	FC	X					Asset management
VAUGHAN NELSON INVESTMENT MANAGEMENT, LP	FC	X					Asset management
Mirova US LLC	FC	X					Asset management
Natixis Investment Managers US Holdings, LLC	FC	X					Holding
Mirova US LLC	FC	X					Holding
SunFunder Inc.	FC	X					Private debt management company
Natixis IM innovation	FC	X					Asset management
AEW Europe SA (formerly AEW SA)	FC	X					Asset management
AEW (formerly AEW Ciloger)	FC	X					Real estate management
DARIUS CAPITAL CONSEIL	FC	X					Financial investment advisory services
DNCA Finance	FC	X					Asset management
Dorval Asset Management	FC	X					Asset management
Flexstone Partners SAS	FC	X					Asset management
Mirova	FC	X					Management of venture capital mutual funds
Natixis Investment Managers International	FC	X					Distribution
Ostrum AM (New)	FC	X					Asset management
Natixis TradEx Solutions	FC	X					Holding
NATIXIS INVESTMENT MANAGERS	FC	X					Holding
NATIXIS INVESTMENT MANAGERS PARTICIPATIONS 1	FC	X					Holding
NATIXIS INVESTMENT MANAGERS PARTICIPATIONS 3	FC	X					Holding
NAXICAP PARTNERS	FC	X					Management of venture capital mutual funds
OSSIAM	FC	X					Asset management
SEVENTURE PARTNERS	FC	X					Asset management
SEEYOND	FC	X					Asset management
Natixis Investment Managers Participations 5 (formerly MV Credit France)	FC	X					Holding
Thematics Asset Management	FC	X					Asset management
Vauban Infrastructure Partners	FC	X					Asset management
Loomis Sayles Capital Re	FC	X					Asset management
AEW EUROPE ADVISORY LTD	FC	X					Asset management
AEW EUROPE CC LTD	FC	X					Asset management
AEW EUROPE HOLDING Ltd	FC	X					Asset management
AEW EUROPE INVESTMENT LTD	FC	X					Asset management
AEW EUROPE LLP	FC	X					Asset management
AEW GLOBAL ADVISORS (EUROPE) LTD	FC	X					Asset management

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
AEW GLOBAL LTD	FC	X					Asset management
AEW GLOBAL UK LTD	FC	X					Asset management
AEW UK INVESTMENT MANAGEMENT LLP	FC	X					Asset management
AEW Promote LP Ltd	FC	X					Asset management
AEW EVP GP LLP	FC	X					Asset management
LOOMIS SAYLES INVESTMENTS Ltd (UK)	FC	X					Asset management
NATIXIS INVESTMENT MANAGERS UK LTD	FC	X					Distribution
Natixis Investment Managers UK (Funds) Limited (UK), LLC	FC	X					Operational support
Mirova UK Limited (formerly Mirova Natural Capital Limited)	FC	X					Asset management
MV Credit Limited	FC	X					Asset management
MV Credit LLP	FC	X					Asset management
AEW ASIA LIMITED	FC	X					Asset management
NATIXIS INVESTMENT MANAGERS HONG KONG LIMITED	FC	X					Asset management
Natixis Investment Managers International Hong Kong Limited	FC	X					Asset management
PURPLE FINANCE CLO 1	FC	X					Securitization vehicle
PURPLE FINANCE CLO 2	FC	X					Securitization vehicle
Asahi Natixis Investment Managers Co. Ltd	EQ			X			Distribution
NATIXIS INVESTMENT MANAGERS JAPAN CO, LTD	FC	X					Asset management
AEW Japan Corporation	FC	X					Asset management
AEW Value Investors Asia III GP Limited	FC	X					Asset management
AEW APREF Investors, LP	FC	X					Asset management
SunFunder East Africa Ltd	FC	X					Private debt management company
AEW EUROPE SARL	FC	X					Asset management
AEW EUROPE GLOBAL LUX	FC	X					Asset management
AEW VIA IV GP Partners SARL	FC	X					Asset management
AEW VIA V GP Partners SARL	FC	X					Asset management
AEW APREF GP SARL	FC	X					Asset management
AEW Core Property (US) Lux GP, SARL	FC	X					Asset management
KENNEDY FINANCEMENT Luxembourg	FC	X					Investment company – Asset management
KENNEDY FINANCEMENT Luxembourg 2	FC	X					Central corporate treasury – Asset management
Loomis Sayles Alpha Luxembourg, LLC	FC	X					Asset management
Loomis Sayles Euro Investment Grade Credit	FC	X					Asset management
NATIXIS INVESTMENT MANAGERS SA	FC	X					Distribution
MV Credit SARL	FC	X					Asset management
Natixis IM Mexico, S. de R.L de C.V.	FC	X					Asset management
Loomis Sayles (Netherlands) B.V.	FC	X					Distribution
AEW CENTRAL EUROPE	FC	X					Asset management
Natixis Investment Managers Singapore Limited	FC	X					Asset management
AEW Asia Pte Ltd	FC	X					Asset management
LOOMIS SAYLES INVESTMENTS ASIA Pte Ltd	FC	X					Asset management
Flexstone Partners SARL	FC	X					Asset management

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not consolidated Not deducted	Deducted	Description of the entity
Natixis Investment Managers Switzerland SARL	FC	X					Asset management
NATIXIS INVESTMENT MANAGERS SECURITIES INVESTMENT CONSULTING CO. LTD	FC	X					Asset management
Natixis Investment Managers Uruguay SA	FC	X					Distribution
Natixis Investment Managers SA, Zweignierderlassung Deutschland	FC	X					Distribution
Natixis Investment Managers International Zweignierderlassung Deutschland	FC	X					Distribution
Aew Asia Limited Australian branch	FC	X					Asset management
Natixis Investment Managers SA, Belgian Branch	FC	X					Distribution
Natixis Investment Managers Middle East	FC	X					Distribution
Natixis Investment Managers, Branch in Spain	FC	X					Distribution
AEW Europe LLP, Spain branch	FC	X					Distribution
Natixis Investment Managers, Branch In Spain	FC	X					Distribution
MV Credit SARL, France branch	FC	X					Asset management
AEW Italian Branch (formerly AEW Ciloger Italian Branch)	FC	X					Distribution
DNCA Finance, Milan Branch	FC	X					Asset management
Natixis Investment Manager, Italy Branch	FC	X					Distribution
Seeyond Italy branch	FC	X					Asset management
Ostrum Asset Management Italia	FC	X					Asset management
DNCA Finance Branch Luxembourg	FC	X					Asset management
Loomis Sayles & Company, LP, Dutch branch	FC	X					Distribution
AEW – Dutch branch	FC	X					Real estate management
Natixis Investment Managers International, Netherlands	FC	X					Distribution
AEW Central Europe Czech	FC	X					Distribution
Mirova Sweden Subsidiary	FC	X					Asset management
Natixis Investment Managers, Nordics Subsidiary	FC	X					Distribution
Natixis Private Equity	FC	X					Private equity
Natixis Wealth Management Luxembourg	FC	X					Banking
Natixis Wealth Management	FC	X					Credit institution
VEGA INVESTMENT MANAGERS	FC	X					Mutual fund holding company
1818 IMMOBILIER	FC	X					Real estate operations
TEORA	FC	X					Insurance brokerage company
Massena Partners SA	FC	X					Asset manager and investment advisory firm
Massena Wealth Management SARL	FC	X					Asset manager and investment advisory firm
Massena Partners – Branch	FC	X					Asset manager and investment advisory firm
NATIXIS INTERÉPARGNE	FC	X					Employee savings plan management
NATIXIS ALGÉRIE	FC	X					Banking
S.C.I ALTAIR 1	FC	X					Real estate operations
S.C.I. ALTAIR 2	FC	X					Real estate operations
FONCIÈRE KUPKA	FC	X					Real estate operations

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
NATIXIS FONCIÈRE SA	FC	X					Real estate investment
Insurance division							
BPCE ASSURANCES	FC			X			Insurance company holding company
NA	FC			X			Insurance company holding company
BPCE LIFE	FC			X			Life insurance
BPCE LIFE France branch	FC			X			Life insurance
BPCE IARD (formerly ASSURANCES BANQUE POPULAIRE IARD)	EQ			X			Property damage Insurance
BPCE Prévoyance	FC			X			Personal protection Insurance
ADIR	EQ			X			Property damage Insurance
FRUCTIFONCIER	FC			X			Insurance real estate investments
BPCE Vie	FC			X			Insurance
RÉAUMUR ACTIONS	FC			X			Insurance investment mutual fund
NAMI INVESTMENT	FC			X			Insurance real estate investments
ECUREUIL VIE DÉVELOPPEMENT	EQ			X			Insurance
BPCE RELATION ASSURANCES	FC			X			Services company
SCI DUO PARIS	EQ			X			Real estate management
Fonds TULIP	FC			X			Insurance investments (Securitization funds)
DNCA INVEST NORDEN	FC			X			Insurance investment mutual fund
AAA ACTIONS AGRO ALIMENTAIRE	FC			X			Insurance investment mutual fund
SCPI IMMOB EVOLUTIF	FC			X			Insurance real estate investments
OPCI FRANCEUROPE IMMO	FC			X			Insurance investment mutual fund
SELECTIZ	FC			X			Insurance investment mutual fund
SELECTIZ PLUS FCP 4DEC	FC			X			Insurance investment mutual fund
ALLOCATION PILOTÉE ÉQUILIBRE C	FC			X			Insurance investment mutual fund
MIROVA EUROPE ENVIRONNEMENT C	FC			X			Insurance investment mutual fund
Vega Euro Rendement FCP RC	FC			X			Insurance investment mutual fund
Vega Europe Convictions fund	FC			X			Insurance investment mutual fund
SCPI Atlantique Mur Régions	FC			X			Insurance investment mutual fund
BPCE ASSURANCES IARD (formerly BPCE ASSURANCES)	FC			X			Insurance company
BPCE ASSURANCES PRODUCTION SERVICES	FC			X			Service providers

	12/31/2022						
	a	b	c	d	e	f	g
		Prudential consolidation method[1]					
Entity name	Accounting consolidation method	Full consolidation	Proportionate consolidation	Equity method	Not conso-lidated Not deducted	Deducted	Description of the entity
Payments divison							
BPCE PAYMENT SERVICES (formerly NATIXIS PAIEMENTS SOLUTION)	FC	X					Banking services
BPCE PAYMENTS (formerly Shiva)	FC	X					Holding
BPH (formerly NATIXIS PAYMENT HOLDING)	FC	X					Holding
XPOLLENS (formerly S-MONEY)	FC	X					Payment services
PAYPLUG	FC	X					Payment services
DALENYS SA	FC	X					Holding
DALENYS INTERNATIONAL	FC	X					Holding
DALENYS FINANCE	FC	X					Holding
DALENYS PAYMENT	FC	X					Payment services
SWILE	EQ			X			Payment services, Service vouchers and Online services for employees
Others							
BPCE IMMO EXPLOITATION (formerly NATIXIS IMMO EXPLOITATION)	FC	X					Real estate operations
III-4 - CE Holding Participations subsidiaries							
CE HOLDING PARTICIPATIONS	FC	X					Holding
CE CAPITAL	FC	X					Holding
HABITAT EN RÉGION SERVICES	FC	X					Holding
III-5 - Local savings companies							
185 Local savings companies (LSCs)	FC	X					Cooperative shareholders

(1) Prudential consolidation method:

FC Full consolidation
EQ Equity method
JA Joint activities

4

EU CC1 – COMPOSITION OF REGULATORY CAPITAL BY CATEGORY

The following table is presented in the format of Appendix VI, Commission Implementing Regulation (EU) No. 1423/2013 of December 20, 2013. For simplicity, the descriptions presented below are those of Appendix VI, *i.e.* phased-in terms.

		12/31/2022		12/31/2021	
in millions of euros		(a)	(b)	(a)	(b)
		Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation	Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation
	COMMON EQUITY TIER 1 (CET1) CAPITAL: INSTRUMENTS AND RESERVES				
1	Capital instruments and the related share premium accounts	28,678	4	28,225	4
2	Retained earnings	3,071	4	3,252	4
3	Accumulated other comprehensive income (and other reserves)	44,736	4	41,750	4
EU-3a	Fund for general banking risks	-	-	-	-
4	Amount of qualifying items referred to in Article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	-	-	-	-
5	Minority interests (amount allowed in consolidated CET1)	164	5	193	5
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	3,193	4	3,561	4
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**79,842**	**-**	**76,980**	**-**
	COMMON EQUITY TIER 1 (CET1) CAPITAL: REGULATORY ADJUSTMENTS				
7	Additional value adjustments (negative amount)	(869)	-	(702)	-
8	Intangible assets (net of related tax liabilities) (negative amount)	(4,931)	2	(4,826)	2
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 (3) CRR are met) (negative amount)	(896)	1	(699)	1
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	(597)	-	65	-
12	Negative amounts resulting from the calculation of expected loss amounts	(189)	-	(203)	-
13	Any increase in equity that results from securitized assets (negative amount)	-	-	-	-
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(199)	-	109	-
15	Defined-benefit pension fund assets (negative amount)	(99)	-	-	-
16	Direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount)	(8)	-	(8)	-
17	Direct, indirect and synthetic 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)	-	-	-	-
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	-	-	-
EU-20a	Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative	-	-	-	-

in millions of euros		12/31/2022		12/31/2021	
		(a)	(b)	(a)	(b)
		Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation	Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation
EU-20b	• of which: qualifying holdings outside the financial sector (negative amount)	-	-	-	-
EU-20c	• of which: securitization positions (negative amount)	-	-	-	-
EU-20d	• of which: free deliveries (negative amount)	-	-	-	-
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) of the CRR are met) (negative amount)	-	-	-	-
22	Amount exceeding the 17.65% threshold (negative amount)	-	-	-	-
23	• of which: 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	-	-	-	-
24	Not applicable	-	-	-	-
25	• of which: deferred tax assets arising from temporary differences	-	-	-	-
EU-25a	Losses for the current fiscal year (negative amount)	-	-	-	-
EU-25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	-	-	-	-
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	(22)	-	(22)	-
27a	Other regulatory adjustments	(2,367)	-	(930)	-
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(10,177)**	**-**	**(7,216)**	**-**
29	**Common Equity Tier 1 (CET1)**	**69,665**	**-**	**69,764**	**-**
	ADDITIONAL TIER 1 (AT1) CAPITAL: INSTRUMENTS				
30	Capital instruments and the related share premium accounts	-	-	-	-
33	Amount of qualifying items referred to in Article 484 (4) CRR and the related share premium accounts subject to phase out from AT1	-	-	-	-
EU-33a	Amount of qualifying items referred to in Article 494a (1) CRR subject to phase out from AT1	-	-	-	-
EU-33b	Amount of qualifying items referred to in Article 494b (1) CRR subject to phase out from AT1	-	-	-	-
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	-	-	-	-
35	• of which: instruments issued by subsidiaries subject to phase out	-	-	-	-
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**-**	**-**	**-**	**-**
	ADDITIONAL TIER 1 (AT1) CAPITAL: REGULATORY ADJUSTMENTS				
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	-	-	-	-
38	Direct, indirect and synthetic 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)	-	-	-	-

in millions of euros		12/31/2022 (a) Amount	12/31/2022 (b) Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation	12/31/2021 (a) Amount	12/31/2021 (b) Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(22)	-	(22)	-
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	-	-	-	-
42a	Other regulatory adjustments to AT1 capital	-	-	-	-
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(22)**	**-**	**(22)**	**-**
44	**Additional Tier 1 (AT1) capital**	**-**	**-**	**-**	**-**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**69,665**	**-**	**69,764**	**-**
	TIER 2 (T2) CAPITAL: INSTRUMENTS				
46	Capital instruments and the related share premium accounts	13,483	3	13,699	3
47	Amount of qualifying items referred to in Article 484 (5) CRR and the related share premium accounts subject to phase out from T2 as described in Article 486(4) CRR	-	-	6	-
EU-47a	Amount of qualifying items referred to in Article 494a (2) CRR subject to phase out from T2	-	-	-	-
EU-47b	Amount of qualifying items referred to in Article 494b (2) CRR subject to phase out from T2	105	3	117	3
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	-	-	-	-
50	Credit risk adjustments	889	-	736	-
51	**Tier 2 (T2) capital before regulatory adjustments**	**14,478**	**-**	**14,558**	**-**
	TIER 2 (T2) CAPITAL: REGULATORY ADJUSTMENTS				
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(25)	-	(25)	-
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	-	-	-
54	Direct, indirect and synthetic 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)	-	-	-	-
55	Direct, indirect and synthetic 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)	(1,693)	-	(1,582)	-
EU-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	-	-	-	-
EU-56b	Other regulatory adjustments to T2 capital	-	-	-	-
57	**Total regulatory adjustments to Tier 2 (T2) capital**	**(1,718)**	**-**	**(1,607)**	**-**
58	**Tier 2 (T2) capital**	**12,759**	**-**	**12,951**	**-**

		12/31/2022		12/31/2021	
in millions of euros		(a)	(b)	(a)	(b)
		Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation	Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation
59	**Total capital (TC = T1 + T2)**	**82,424**	**-**	**82,715**	**-**
60	**Total risk exposure amount**	**460,858**	**-**	**441,428**	**-**
	CAPITAL RATIOS AND REQUIREMENTS, INCLUDING BUFFERS				
61	Common Equity Tier 1 (CET1)	15.12%	-	15.80%	-
62	Tier 1 capital	15.12%	-	15.80%	-
63	Total equity	17.88%	-	18.74%	-
64	Total CET1 capital requirements of the institution	9.15%	-	9.33%	-
65	• of which: capital conservation buffer requirement	2.50%	-	2.50%	-
66	• of which: countercyclical buffer requirement	0.03%	-	0.02%	-
67	• of which: systemic risk buffer requirement	0.00%	-	0.00%	-
EU-67a	• of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	1.00%	-	1.00%	-
68	**Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)**	**9.12%**	**-**	**9.99%**	**-**
	AMOUNTS BELOW THE THRESHOLDS FOR DEDUCTION (BEFORE RISK WEIGHTING)				
72	Direct and indirect holdings of own funds and eligible liabilities 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)	1,152	-	1,337	-
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 17.65% thresholds and net of eligible short positions)	2,403	-	2,910	-
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in Article 38 (3) of the CRR are met)	2,951	-	2,348	-
	APPLICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2				
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	-	-	-	-
77	Cap on inclusion of credit risk adjustments in T2 under standardized approach	1,989	-	1,893	-
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	889	-	736	-
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	1,122	-	1,051	-
	CAPITAL INSTRUMENTS SUBJECT TO PHASE-OUT ARRANGEMENTS (ONLY APPLICABLE BETWEEN JANUARY 1, 2014 AND JANUARY 1, 2022)				
80	Current cap on CET1 instruments subject to phase out arrangements	-	-	-	-
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	-	-	-
82	Current cap applicable on AT1 instruments subject to phase out	-	-	-	-
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	-	-	-
84	Current cap applicable on T2 instruments subject to phase out	-	-	6	-

		12/31/2022		12/31/2021	
in millions of euros		(a)	(b)	(a)	(b)
		Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation	Amount	Source based on balance sheet reference numbers/letters according to the regulatory scope of consolidation
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	10	-	55	-

BPCE08 – ADDITIONAL TIER 1 CAPITAL

in millions of euros	12/31/2022 Basel III	12/31/2021 Basel III phased-in
AT1 capital instruments ineligible but benefiting from a grandfathering clause[1]	-	-
Holdings of AT1 instruments of financial sector entities more than 10%-owned	-	-
Transitional adjustments applicable to AT1 capital	-	-
ADDITIONAL TIER 1 (AT1) CAPITAL	**-**	**-**

(1) Amount after application of the transitional provisions: corresponds to 10% of the outstanding perpetual subordinated notes at 12/31/2021.

BPCE09 – ISSUES OF DEEPLY SUBORDINATED NOTES

Issuer	Issue date	Currency	Amount in original currency *(in millions)*	Net outstandings *(in millions of euros)*	Prudential net outstandings *(in millions of euros)*
			-	-	-
TOTAL				**-**	**-**

Details of debt instruments recognized as Tier 1 capital, as well as their terms, as required by Implementing Regulation No. 1423/2013 are published at the following address: https://groupebpce.com/en/investors/results-and-publications/pillar-iii,

BPCE10 – TIER 2 CAPITAL

in millions of euros	12/31/2022 Basel III	12/31/2021 Basel III phased-in[1]
Eligible Tier 2 capital instruments	13,483	13,699
Own Tier 2 instruments	(25)	(25)
Tier 2 capital instruments ineligible but benefiting from a grandfathering clause[1]	105	123
Holdings of Tier 2 instruments of financial sector entities more than 10%-owned	(1,693)	(1,582)
Transitional adjustments applicable to Tier 2 capital	-	-
Excess provision over expected losses	889	736
TIER 2 CAPITAL	**12,759**	**12,951**

(1) Amount after application of the transitional provisions: corresponds to 10% of the outstanding perpetual subordinated notes at 12/31/2021.

BPCE11 – ISSUES OF SUBORDINATED NOTES

Issuer	Issue date	Maturity date	Currency	Amount in original currency *(in millions)*	Outstandings *(in millions of euros)*	Prudential net outstandings *(in millions of euros)*
BPCE	07/18/2013	07/18/2023	EUR	1,000	1,000	109
BPCE	10/22/2013	10/22/2023	USD	1,500	1,406	227
BPCE	01/21/2014	07/21/2024	USD	1,500	1,406	437
BPCE	04/16/2014	04/16/2029	GBP	750	845	845
BPCE	07/25/2014	06/25/2026	EUR	350	350	244
BPCE	07/25/2014	06/25/2026	EUR	525	525	366
BPCE	07/11/2014	07/11/2024	USD	800	750	229
BPCE	09/15/2014	03/15/2025	USD	1,250	1,171	517
BPCE	09/30/2014	09/30/2024	EUR	410	410	144
BPCE	01/30/2015	01/30/2025	JPY	27,200	193	81
BPCE	01/30/2015	01/30/2025	JPY	13,200	94	39
BPCE	02/17/2015	02/17/2027	EUR	240	240	197
BPCE	02/17/2015	02/17/2027	EUR	371	371	306
BPCE	03/24/2015	03/12/2025	EUR	375	375	165
BPCE	04/17/2015	04/17/2035	USD	270	253	253
BPCE	04/29/2015	04/17/2035	USD	100	94	94
BPCE	04/29/2015	04/17/2035	USD	30	28	28
BPCE	06/01/2015	06/01/2045	USD	130	122	122
BPCE	09/29/2015	09/29/2025	CHF	50	51	28
BPCE	12/11/2015	12/11/2025	JPY	25,100	178	105
BPCE	12/11/2015	12/11/2025	JPY	500	4	2
BPCE	03/17/2016	03/17/2031	EUR	60	60	60
BPCE	03/17/2016	03/17/2036	USD	150	141	141
BPCE	04/01/2016	04/01/2026	USD	750	703	457
BPCE	04/22/2016	04/22/2026	EUR	750	750	496
BPCE	05/03/2016	05/03/2046	USD	200	187	187
BPCE	07/19/2016	07/19/2026	EUR	696	696	494
BPCE	07/13/2016	07/13/2026	JPY	17,300	123	87
BPCE	10/13/2021	01/13/2042	EUR	900	900	900
BPCE	10/13/2021	10/13/2046	EUR	850	850	850
BPCE	10/19/2021	10/19/2042	USD	750	703	703
BPCE	10/19/2021	10/19/2032	USD	1,000	937	937
BPCE	12/01/2021	11/30/2032	GBP	500	564	564
BPCE	12/16/2021	12/16/2031	JPY	74,600	530	530
BPCE	12/16/2021	12/16/2036	JPY	5,800	41	41
BPCE	01/14/2022	01/14/2037	USD	800	750	750
BPCE	02/02/2022	02/02/2034	EUR	1,000	1,000	1,000
BPCE	03/02/2022	03/02/2032	EUR	500	500	500
BPCE	07/07/2022	07/07/2032	JPY	26,600	189	189
BPCE	12/15/2022	12/15/2032	JPY	8,400	60	60
CFF	03/06/2003	03/06/2023	EUR	10	10	-
TOTAL					**19,557**	**13,483**

EU CCYB1 – GEOGRAPHIC DISTRIBUTION OF CREDIT EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL CAPITAL BUFFER

		12/31/2022												
		a	b	c	d	e	f	g	h	i	j	k	l	m
		General credit exposures		Relevant credit exposures – Market risk				Capital requirements						
in millions of euros		Exposure value under the standardized approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Securitization exposures Value at Risk for the banking book	Total exposure value	Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitization positions in the banking book	Total	Risk-Weighted Assets	Capital requirement weights *(%)*	Countercyclical buffer rate *(%)*
010	BREAKDOWN BY COUNTRY:													
	Bulgaria	-	2	-	-	-	2	-	-	-	-	-	0.00%	1.00%
	Czech Republic	14	11	-	-	-	25	1	-	-	1	16	0.00%	1.50%
	Denmark	252	88	12	-	-	352	22	-	-	23	283	0.08%	2.00%
	Estonia	-	3	-	-	-	4	-	-	-	-	4	0.00%	1.00%
	United Kingdom	1,206	7,722	166	43	1,587	10,725	314	6	20	339	4,234	1.15%	1.00%
	Hong Kong	264	2,337	29	-	208	2,838	83	1	3	87	1,084	0.29%	1.00%
	Iceland	-	1	-	-	-	1	-	-	-	-	-	0.00%	2.00%
	Luxembourg	2,109	7,925	44,798	176	505	55,513	437	3	4	444	5,552	1.51%	0.50%
	Norway	336	381	24	-	-	741	26	1	-	27	334	0.09%	2.00%
	Romania	12	11	-	-	-	23	1	-	-	1	14	0.00%	0.50%
	Sweden	93	173	33	-	-	299	12	2	-	14	172	0.05%	1.00%
	Slovakia	10	6	3	29	-	48	1	-	-	1	9	0.00%	1.00%
	Other countries weighted at 0%	176,847	700,846	10,307	14,548	20,133	922,680	28,059	134	326	28,519	356,489	96.82%	0.00%
020	**TOTAL**	**181,143**	**719,506**	**55,371**	**14,798**	**22,433**	**993,251**	**28,957**	**145**	**353**	**29,455**	**368,191**	**100.00%**	

	12/31/2021												
	b	c	d	e	f	g	h	i	j	k	l	m	
	General credit exposures		Relevant credit exposures – Market risk				Capital requirements						
in millions of euros	Exposure value under the standardized approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Securitization exposures Value at risk for the banking book	Total exposure value	Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitization positions in the banking book	Total	Risk-Weighted Assets	Capital requirement weights *(%)*	Counter-cyclical buffer rate *(%)*
010 BREAKDOWN BY COUNTRY:													
Bulgaria	-	5	-	-	-	5	-	-	-	-	1	0.00%	0.50%
Czech Republic	31	5	-	-	-	36	2	-	-	2	28	0.01%	0.50%
Hong Kong	39	2,853	25	0	0	2,916	86	-	-	86	1,079	0.30%	1.00%
Luxembourg	1,747	7,230	41,093	176	327	50,574	540	4	4	548	6,844	1.93%	0.50%
Norway	324	586	65	0	-	976	190	1	-	191	2,383	0.67%	1.00%
Slovakia	28	1	6	29	-	65	2	-	-	2	21	0.01%	1.00%
Other countries weighted at 0%	170,602	666,015	13,559	14,626	18,096	882,898	27,029	247	324	27,601	345,008	97.09%	0.00%
020 TOTAL	**172,771**	**676,696**	**54,748**	**14,832**	**18,423**	**937,470**	**27,849**	**252**	**328**	**28,429**	**355,364**	**100.00%**	

EU CCYB2 – AMOUNT OF INSTITUTION-SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER

		a	
in millions of euros		12/31/2022	12/31/2021
1	Total risk exposure amount	460,858	441,428
2	Institution-specific countercyclical capital buffer rate	0.03%	0.02%
3	Institution-specific countercyclical capital buffer requirement	119	86

EU PV1 – PRUDENT VALUATION ADJUSTMENT (PVA)

		a	b	c	d	e	EU e1	EU e2	f	g	h
		12/31/2022									
in millions of euros		Risk category					Category level AVA – Valuation uncertainty		Total AVA category post-diversification	Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
Category level AVA		Equities	Interest rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA			
1	Market price uncertainty	132	16	5	286	1	47	37	262	62	200
3	Close-out costs	177	16	11	92	-	47	-	172	49	123
4	Concentrated positions	131	-	-	3	-	-	-	134	132	2
5	Early termination	-	-	-	-	-	-	-	-	-	-
6	Model risk	52	8	29	27	-	56	-	86	78	8
7	Operational risk	22	2	1	19	-	-	-	43	8	35
10	Future administrative costs	19	136	5	9	2	-	-	170	170	-
12	**TOTAL ADDITIONAL VALUATION ADJUSTMENTS (AVAS)**								**869**	**500**	**369**

		a	b	c	d	e	EU e1	EU e2	f	g	h
		12/31/2021									
in millions of euros		Risk category					Category level AVA – Valuation uncertainty		Total AVA category post-diversification	Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
Category level AVA		Equities	Interest rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA			
1	Market price uncertainty	124	13	7	176	1	26	16	182	72	110
3	Close-out costs	65	3	9	119	4	26	-	115	62	53
4	Concentrated positions	132	-	-	4	-	-	-	136	133	3
5	Early termination	-	-	-	-	-	-	-	-	-	-
6	Model risk	60	2	2	2	-	3	-	35	35	-
7	Operational risk	9	1	1	15	-	-	-	26	9	17
10	Future administrative costs	21	173	5	8	-	-	-	208	207	1
12	**TOTAL ADDITIONAL VALUATION ADJUSTMENTS (AVAS)**								**702**	**518**	**184**

EU LR2 – LRCOM – LEVERAGE RATIO

The leverage ratio compares Tier 1 capital to an exposure calculated quarterly on the basis of the balance sheet and off-balance sheet assets assessed using a prudential approach. Derivatives and repurchase agreements are subject to specific restatements. The commitments given are allocated a conversion factor in accordance with Article 429 (10) of the CRR.

		Exposures for leverage ratio purposes under the CRR	
		a	b
in millions of euros		12/31/2022	12/31/2021
ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES AND SFTS)			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	1,273,563	1,272,343
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(12,134)	(12,448)
4	(Adjustment for securities received under securities financing transactions that are recognized as an asset)	-	-
5	(General credit risk adjustments to on-balance sheet items)	-	-
6	(Asset amounts deducted in determining Tier 1 capital)	(7,707)	(5,693)
7	**Total on-balance sheet exposures (excluding derivatives and SFTs)**	**1,253,723**	**1,254,203**
DERIVATIVE EXPOSURES			
8	Replacement cost associated with SA-CCR derivatives transactions (*i.e.* net of eligible cash variation margin)	17,554	13,236
EU-8a	Derogation for derivatives: replacement costs contribution under the simplified standardized approach	-	-
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	25,644	26,686
EU-9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardized approach	-	-
EU-9b	Exposure determined under original exposure method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	-	-
EU-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardized approach)	-	-
EU-10b	(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	-	-
11	Adjusted effective notional amount of written credit derivatives	37,945	16,727
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(34,268)	(10,655)
13	**Total derivative exposures**	**46,875**	**45,994**
SECURITIES FINANCING TRANSACTION (SFT) EXPOSURES			
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	68,930	62,934
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-	-
16	Counterparty credit risk exposure for SFT assets	8,997	7,766
EU-16a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429e (5) and 222 CRR	-	-
17	Agent transaction exposures	-	-
EU-17a	(Exempted CCP leg of client-cleared SFT exposure)	-	-
18	**Total securities financing transaction exposures**	**77,927**	**70,700**
OTHER OFF-BALANCE SHEET EXPOSURES			
19	Off-balance sheet exposures at gross notional amount	220,917	207,507
20	(Adjustments for conversion to credit equivalent amounts)	(121,686)	(115,481)
21	(General provisions associated with off-balance sheet exposures deducted in determining Tier 1 capital)	-	-
22	**Off-balance sheet exposures**	**99,231**	**92,026**
EXCLUDED EXPOSURES			
EU-22a	(Exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of Article 429a (1) of the CRR)	(4,028)	-

		Exposures for leverage ratio purposes under the CRR	
		a	b
in millions of euros		12/31/2022	12/31/2021
EU-22b	(Exposures exempted in accordance with point (j) of Article 429a (1) of the CRR (on and off balance sheet))	(85,047)	(76,596)
EU-22c	(Excluded exposures of public development banks – Public sector investments)	-	-
EU-22d	(Excluded promotional loans of public development banks: Promotional loans granted by a public development credit institution)	-	-
EU-22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))	-	-
EU-22f	(Excluded guaranteed parts of exposures arising from export credits)	-	-
EU-22g	(Excluded excess collateral deposited at triparty agents)	-	-
EU-22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of Article 429a (1) of the CRR)	-	-
EU-22i	(Excluded CSD related services of designated institutions in accordance with point (p) of Article 429a (1) of the CRR)	-	-
EU-22j	(Reduction of the exposure value of pre-financing or intermediate loans)	-	-
EU-22k	**(Total exempted exposures)**	**(89,075)**	**(76,596)**
CAPITAL AND TOTAL EXPOSURE MEASURE			
23	**Tier 1 capital**	**69,665**	**69,764**
24	**Total exposure measure**	**1,388,681**	**1,212,857**
LEVERAGE RATIO			
25	Leverage ratio *(in %)*	5.02%	5.75%
EU-25	Leverage ratio (without the adjustment due to excluded exposures of public development banks – Public sector investments) *(in %)*	5.02%	5.75%
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) *(in %)*	5.02%	5.03%
26	Regulatory minimum leverage ratio requirement *(in %)*	3.00%	3.23%
EU-26b	Additional leverage ratio requirements *(in %)*	0.00%	0.00%
CHOICE OF TRANSITIONAL ARRANGEMENTS AND RELEVANT EXPOSURES			
EU-27b	Choice on transitional arrangements for the definition of the capital measure	-	-
DISCLOSURE OF MEAN VALUES			
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	89,378	72,800
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	68,930	62,934
30	Total exposures (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	1,409,128	1,222,724
30a	Total exposures (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	1,409,128	1,395,492
31	Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	4.94%	5.71%
31a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	4.94%	5.00%

EU LR3 – LRSPL: BREAKDOWN OF BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS AND EXEMPTED EXPOSURES)

		a	b
		12/31/2022	12/31/2021
in millions of euros		Exposures for leverage ratio purposes under the CRR	Exposures for leverage ratio purposes under the CRR
EU-1	**TOTAL ON-BALANCE SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFT AND EXEMPTED EXPOSURES), OF WHICH:**	**1,172,480**	**1,010,531**
EU-2	Trading book exposures	61,189	81,385
EU-3	Banking book exposures, of which:	1,111,291	929,147
EU-4	Covered bonds	1,041	913
EU-5	Exposures considered as sovereign	252,826	80,664
EU-6	Exposures to regional governments, MDB, international organizations and PSE not treated as sovereigns	61,554	63,413
EU-7	Institutions	13,662	21,759
EU-8	Exposures secured by a real estate mortgage	407,317	374,404
EU-9	Retail exposures	117,038	103,601
EU-10	Corporate customers	191,326	170,593
EU-11	Exposures in default	18,100	17,935
EU-12	Other exposures (*e.g.* equity, securitizations, and other non-credit obligation assets)	48,427	95,865

EU INS2 – FINANCIAL CONGLOMERATE – INFORMATION ON CAPITAL AND CAPITAL ADEQUACY RATIO

		12/31/2022	12/31/2021
in millions of euros		a	b
1	Additional capital requirements of the financial conglomerate *(amount)*	3,104	2,871
2	Financial conglomerate capital adequacy ratio *(in %)*	18.06%	18.70%

EU KM2 – KEY INDICATORS – TLAC RATIO

		b	c	d	e	f
in millions of euros		12/31/2022	09/30/2022	06/30/2022	03/31/2022	12/31/2021
	OWN FUNDS AND ELIGIBLE LIABILITIES, RATIOS AND COMPONENTS OF THE RESOLUTION GROUP					
1	TLAC equity and eligible liabilities	109,503	111,868	110,486	110,269	109,407
2	Risk-weighted assets *(RWA)*	460,858	460,514	459,214	448,000	441,428
3	TLAC ratio *(in % of RWA)*	23.76%	24.29%	24.06%	24.61%	24.78%
4	Leverage exposure measure	1,388,681	1,408,372	1,335,218	1,242,971	1,212,857
5	TLAC ratio *(in % of leverage exposure)*	7.89%	7.94%	8.15%	8.87%	9.02%
6a	Does the exemption from subordination allowed by Article 72b (4) of Regulation (EU) No. 575/2013 apply? (5% exemption)	n.a	n.a	n.a	n.a	n.a
6b	Aggregate amount of permitted non-subordinated eligible liabilities instruments if the subordination discretion as per Article 72b (3) of Regulation (EU) No. 575/2013 is applied (max 3.5% exemption)	n.a	n.a	n.a	n.a	n.a
6c	If a capped subordination exemption applies under Article 72b (3) of Regulation (EU) No. 575/2013, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognized under row 1, divided by funding issued that ranks pari passu with excluded Liabilities and that would be recognized under row 1 if no cap was applied *(in %)*	n.a	n.a	n.a	n.a	n.a

NB: As part of the annual resolvability analysis, Groupe BPCE chose to waive the option provided for by Article 72b (3) of the CRR to use preferred senior debt to comply with the TLAC and subordinated MREL.

EU TLAC 1 – COMPOSITION TLAC RATIO

in millions of euros		12/31/2022 a G-SII requirement for own funds and eligible liabilities (TLAC)	12/31/2021 b Capital adequacy and eligible liabilities and eligible liabilities applicable to EISm (TLAC)
1	Common Equity Tier 1 (CET1)	69,665	69,764
2	Additional Tier 1 (AT1) capital	-	-
6	Tier 2 (T2) capital	12,759	12,951
11	TLAC eligible capital	82,424	82,715
12	Eligible liabilities instruments issued directly by the resolution entity that are subordinated to excluded liabilities (not grandfathered)	13,250	8,849
EU-12a	Eligible liabilities instruments issued by other entities within the resolution group that are subordinated to excluded liabilities (not grandfathered)	-	-
EU-12b	Eligible liabilities instruments that are subordinated to excluded liabilities, issued prior to 06/27/2019 (subordinated grandfathered)	9,273	13,542
EU-12c	Tier 2 instruments with a residual maturity of at least one year to the extent they do not qualify as Tier 2 items	4,555	4,300
13	Eligible liabilities that are not subordinated to excluded liabilities (not grandfathered pre cap)	-	-
EU-13a	Eligible liabilities that are not subordinated to excluded liabilities issued prior to 06/27/2019 (pre-cap)	-	-
14	Amount of non-subordinated instruments eligible, where applicable after application of Article 72b (3) of Regulation (EU) No. 575/2013	-	-
17	TLAC-eligible liabilities items before adjustments	27,079	26,692
EU-17a	of which: subordinated liabilities	27,079	26,692
18	TLAC-eligible equity items before adjustments	109,503	109,407
19	(Deduction of exposures between MPE resolution groups)	-	-
20	(Deduction of investments in other eligible liabilities instruments)	-	-
22	TLAC-own funds and eligible liabilities after adjustments	109,503	109,407
23	Risk-weighted assets *(RWA)*	460,858	441,428
24	Total leverage exposure measure	1,388,681	1,212,857
25	TLAC ratio *(in % of RWA)*	23.76%	24.78%
26	TLAC ratio *(in % of leverage exposure)*	7.89%	9.02%
27	CET1 (as a percentage of TREA) available after meeting the resolution group's requirements	2.24%	3.27%
28	Overall institution-specific capital buffer requirement	3.53%	3.52%
29	• *of which: capital conservation buffer requirement*	*2.50%*	*2.50%*
30	• *of which: countercyclical buffer requirement*	*0.03%*	*0.02%*
31	• *of which: systemic risk buffer requirement*	*0.00%*	*0.00%*
EU-31a	• *of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	*1.00%*	*1.00%*
EU-32	Total amount of excluded liabilities referred to in Article 72a (2) of Regulation (EU) No. 575/2013	641,866	660,311

The creditor hierarchy for items included in the TLAC is as follows by order of repayment priority: senior non-preferred debt, subordinated debt eligible as Tier 2 capital on issuance and subordinated debt eligible as Tier 1 capital on issuance.

Eligible liabilities and their features are published at the following address: https://groupebpce.com/en/investors/results-and-publications/pillar-iii

EU TLAC 3A: RANK IN THE HIERARCHY OF CREDITORS – RESOLUTION GROUP

	12/31/2022			
	Hierarchy in the event of insolvency			
	1	2	4	
in millions of euros	(lowest rank)		(highest rank)	TOTAL
Description of insolvency rank	CET1 capital	Tier 2	Senior non-preferred debt	
Liabilities and own funds	69,665	19,430	26,776	115,871
• *of which: excluded liabilities*	-	-	-	-
Liabilities and own funds less excluded liabilities	69,665	19,430	26,776	115,871
Of which instruments eligible for the TLAC ratio	69,665	17,314	22,524	109,503
• *of which: residual maturity ≥ 1 year < 2 years*	-	*2,617*	*3,676*	*6,293*
• *of which: residual maturity ≥ 2 years < 5 years*	-	*8,991*	*10,405*	*19,396*
• *of which: residual maturity ≥ 5 years < 10 years*	-	*4,554*	*8,363*	*12,918*
• *of which: residual maturity ≥ 10 years, but excluding perpetual securities*	-	*1,646*	*79*	*1,725*
• *of which: perpetual securities*	*69,665*	-	-	*69,665*

5

CREDIT RISKS

Foreword

The Group Risk division adapted its crisis management framework in 2022 to the new geopolitical and economic context induced by the Russia-Ukraine conflict and the ensuing increase in the cost of energy, generating high inflation and a rise in interest rates. Initiatives have been put in place to identify the sectors and counterparties that would be most impacted by this new crisis, both at the level of individual, professional and corporate customers.

5.1 Credit risk management

As part of its prerogatives, the Credit Risk division is responsible for the following main tasks:

- defining and implementing the standards and methods for risk taking and management within the Group's consolidated scope in accordance with regulations;
- participating in risk measurement and management systems;
- establishing the principles of Risk division through global risk caps and monitoring compliance with them;
- defining and reviewing the Group's risk management systems by drawing up Group credit risk policies and defining individual limits on shared counterparties;
- analyzing the non-delegated grant files of the Group's subsidiaries and examine the main files managed in the Watchlist;
- assessing and controlling the level of credit risk across the Group;
- coordinating the Credit Risk functions, in particular through very frequent audio-conferences, national days, regional platforms or thematic working groups;
- monitoring the various portfolios by type of client, asset class and sector;
- building and managing credit risk applications.

5.1.1 Credit risk management

CREDIT POLICY

The overall credit risk policy is governed in particular by the risk appetite system, structured around the definition of the level of risk and risk appetite indicators. The balance between the search for profitability and the level of risk accepted is reflected in Groupe BPCE's credit risk profile and is reflected in the Group's credit risk management policies. Groupe BPCE refrains from engaging in activities over which it has insufficient control. Activities with high risk-reward profiles are identified and strictly controlled.

In general, Groupe BPCE's credit approval process is based first and foremost on the customer's ability to repay the loan, *i.e.* future cash flows, with clearly identified sources and channels and a reasonably realistic probability of occurrence.

RATING POLICY

Credit risk measurement relies on internal rating systems tailored to each category of customer and transaction. The Risk division is responsible for defining and verifying the performance of these rating systems.

An internal rating methodology common to all Groupe BPCE institutions (specific to each customer segment) is applied for "individual and professional customers", as well as for "corporate customers", "real estate professionals", "project financing", "central banks and other sovereign exposures", "central governments", "public-sector and similar entities" and "financial institutions".

CREDIT RISK GOVERNANCE

- A dedicated governance structure is in place for the construction of all credit risk management, granting and classification systems.

Each standard, policy, system or method is the focus of workshops, organized and led by the Risk division teams, made up of Group representatives. The purpose of these workshops is to define the rules and expectations for each topic addressed, as it relates to the Group's risk appetite and regulatory constraints. These topics are then decided by a Group committee made up of executive managers.

Compliance with regulatory and internal caps and limits is regularly checked by the Group Risk and Compliance Committee and the Risk Committees of the Supervisory Board. Each institution is responsible for ensuring compliance with internal limits.

The Group Risk division also defines, for all institutions, the common framework of Level 2 permanent controls (CPN2) for credit risks and contributes to the coordination of Level 1 controls.

The Risk function is organized according to the principle of subsidiarity with a strong functional link:	• each institution in Groupe BPCE has a Risk division covering credit and counterparty risks. Each institution manages its risks in accordance with Group standards and prepares a risk report every six months; • each Head of Risk is in close contact with the Group Chief Risk Officer. The latter reports to the Chairman of the Management Board of Groupe BPCE and is a member of the Executive Management Committee;
Credit approval decisions deployed or adapted at each Group institution are supervised within a system made up of:	• risk policies and sector policies; • regulatory caps, Group internal caps, internal caps for institutions in the Banque Populaire and Caisses d'Epargne networks and all BPCE subsidiaries; • a set of Group internal limits covering the major categories of counterparties (a company made up of a parent and its subsidiaries) on a consolidated basis, for the main asset classes excluding retail, supplemented as needed by local limits; predominantly based on the internal rating approach, these methodologies are used to define the maximum risk that Groupe BPCE is willing to take; • at each Group institution, a pro-con analysis or counter-analysis procedure involving the Risk function, which holds the right to veto decisions, calling on the higher-level Credit Committee for arbitration where necessary, or the duly authorized representative.

HIGHLIGHTS

The year was marked by the outbreak of the war in Ukraine, which led to an increase in energy costs and high inflation, requiring a rise in central bank key rates. The monitoring system inherited from the Covid crisis has been adapted to take into account the new geopolitical and economic context.

The requirement was also maintained for the operational integration of the main standards, rules and policies in institutions in order to guarantee uniform implementation within the Group.

5.1.2 Credit risk supervision system

5.1.2.1 CREDIT RISK SUPERVISION SYSTEM

CAPS AND LIMITS

The system of internal caps used across the Group, which are lower than the regulatory caps, is aimed at increasing the division of risks and is applied to all Group entities.

The internal caps system used by the institutions is lower than or equal to the Group internal caps, and is applied to the Banque Populaire and Caisse d'Epargne networks and the subsidiaries.

A Groupwide set of individual limits has also been established for the major counterparties as well as exposure levels for countries and industries. These limits apply to all Group institutions. The individual limits system in place, aimed at dividing up risks and making them individually acceptable in terms of each institution's profits and capital position, *i.e.* without including the value of collateral, to define the maximum amount of acceptable risk for a given counterparty. The aim of this position is to neutralize the operational risk associated with the recognition of collateral and with execution in the event the institution is required to call in the collateral.

Risk monitoring is organized on a sector-by-sector basis *via* a sector watch shared with all the Group's institutions. Sector policies and limits have been established for that purpose.

On behalf of the Group Risk and Compliance Committee, the Risk division measures and verifies that these risk supervision mechanisms (individual and topical limits) are correctly implemented at each institution.

The Group Supervisory Board is kept informed as Group internal caps are monitored, and is notified of any breaches of limits defined in accordance with the risk appetite framework.

METHOD USED TO ASSIGN OPERATIONAL LIMITS ON INTERNAL CAPITAL

The quarterly Group risk dashboard is used to monitor consumption of risk-weighted assets in the Group's main asset classes: it compares any differentials in terms of changes between gross exposures and consumption of RWA.

By using these systems, the Group is able to accurately monitor the change in capital needed to cover risks in each asset class, while also observing any changes in the quality of the asset classes in question.

CORRELATION RISK POLICY

Correlation risk is governed by a special decision-making process, where a counterparty offers its own shares as collateral. A top-up clause is systematically required on such transactions.

For wrong-way risk, usually associated with collateral swaps between credit institutions, BPCE's liquidity reserve procedure defines this criterion as follows: "the counterparty to the repo and the securities received as collateral for that repo shall not be included in the same regulatory group."

However, these transactions may be reviewed on a case-by-case basis, under a special decision-making process, where the collateral consists exclusively of retail loans serving to finance residential real estate.

5.1.2.2 QUALITY ASSESSMENT OF LOAN OUTSTANDINGS AND IMPAIRMENT POLICY

SYSTEM GOVERNANCE

From a regulatory standpoint, Article 118 of the Ministerial Order of November 3, 2014 on internal control specifies that "at least once each quarter, supervised companies must perform an analysis of changes in the quality of their loan commitments." In particular, this review should determine, for material transactions, whether any reclassifications need to be conducted among the internal risk credit risk assessment categories and, if necessary, the appropriate allocations to non-performing loans and charges to provisions.

When a counterparty is placed on either a local Watchlist (WL) or the Group WL, supervision of the counterparty in question is enhanced (Performing WL) or the decision is made to record an appropriate provision (Default WL).

Statistical provisions for performing loans, calculated at Group level for the networks in accordance with IFRS 9 requirements, are measured using a methodology validated by Group committees (reviewed by an independent unit and validated by the Group Models Committee and the RCCP Standards & Methods Committee). These provisions include scenarios of changes in the economic environment determined each year by the Group's Economic Research team, coupled with probabilities of occurrence reviewed quarterly by the Group Watchlist and Provisions Committee.

The allocated provisioning is calculated by taking into account the present value of the guarantees in a prudent approach.

Any defaulted exposures not covered by provisions shall be subject to enhanced justification requirements to explain why no provision has been recorded.

NETTING OF ON-BALANCE SHEET AND OFF-BALANCE SHEET TRANSACTIONS

For credit transactions, Groupe BPCE is not required to carry out netting of on-balance sheet and off-balance sheet transactions.

RECOGNITION OF PROVISIONS AND IMPAIRMENT UNDER IFRS 9

During 2022, Groupe BPCE continued to implement a prudent IFRS 9 provisioning policy, in an uncertain economic context due to the ongoing health crisis.

Following a reduction in the uncertainties associated with the economic scenarios, the methodological adjustments implemented in the fourth quarter of 2020 concerning the 60% mitigation factor and the twelve-month delay in the NBI projection were lifted at the closing of the first quarter 2022.

The review of ratings for professional customers and small companies that benefited from a SGL or a moratorium was lifted at the closing of the fourth quarter of 2022 when it was estimated that the impact of SGLs and moratoria on their rating had become limited.

Provisioning methods

Debt instruments classified as financial assets at amortized cost or at fair value through other comprehensive income, loan commitments and financial guarantees given that are not recognized at fair value through profit or loss, as well as lease receivables and trade receivables, shall be systematically impaired or covered by a provision for expected credit losses (ECL).

Impairment is recorded, for financial assets which have not been individually subject to ECL, based on observed past losses but also on reasonable and supportable DCF forecasts.

Financial instruments are divided into three categories (Stages) depending on the increase in credit risk observed since initial recognition. A specific credit risk measurement method applies to each category of instrument:

1. Stage 1 (S1)	2. Stage 2 (S2)	3. Stage 3 (S3)
Loan outstandings for which credit risk has not increased materially since the initial recognition of the financial instrument. The impairment or the provision for credit risk corresponds to 12-month expected credit losses.	Performing loans for which credit risk has increased materially since the initial recognition of the financial instrument are transferred to this category. The impairment or the provision for credit risk is determined on the basis of the financial instrument's lifetime expected credit losses.	Impaired exposures, within the meaning of IFRS 9, for which there is objective evidence of impairment loss due to an event which represents a known credit risk occurring (*e.g.* non-repayment of the loan at its normal term, collective proceeding, past due payments recorded by the customer, customer unable to finance an investment in new equipment, etc.) after the initial recognition of the instrument in question. This category covers receivables for which a default event has been identified, as defined in Article 178 of the EU regulation of June 26, 2013 on prudential requirements for credit institutions.

The Group implements a provisioning policy for its corporate customers. This policy lays the foundations for the calculation of loan impairment and defines the methodology for determining individual impairment based on expert opinion. It also defines the components (credit risk measurement, accounting principles on the impairment of customer receivables under IFRS and French GAAP) and data to include in a non-performing loan or disputed loan assessment, as well as essential items to include in a provisioning record.

A corporate provisioning policy for Group exposures of less than €15 million has been defined and implemented.

The methodology section for determining individual impairment based on expert opinion defines impairment approaches: going concern, gone concern, combined approach.

Groupe BPCE applies the contagion principle when identifying groups of customer counterparties, through the ties binding the groups together.

A methodology concerning the practice of applying haircuts to the value of collateral, taking into account inevitable contingencies, has been defined and implemented.

Impairment under IFRS 9

Impairment for credit risk amounts to 12-month expected credit losses or lifetime expected credit losses, depending on the level of increase in credit risk since initial recognition (Stage 1 or Stage 2 asset). A set of qualitative and quantitative criteria is used to assess the increase in credit risk.

A significant increase in credit risk is measured on an individual basis by taking into account all reasonable and supportable information and by comparing the default risk on the financial instrument at the reporting date with the default risk on the financial instrument at the date of initial recognition. Any significant increase in credit risk shall be recognized before the transaction is impaired (Stage 3).

In order to assess a significant increase in credit risk, the Group implemented a process based on rules and criteria which apply to all Group entities:

- for the portfolios of individual customers, professionals and small and medium-sized companies, the quantitative criterion is based on the measurement of the difference between the counterparty's rating at the time of granting and its rating at the closing date. This difference - or denotch - is measured on a master scale common to all these counterparties. The number of denotches before downgrading to status 2 depends on the rating at grant;
- for the large corporate, bank and specialized financing loan books, it is based on the change in rating since initial recognition;
- these quantitative criteria are accompanied by a set of qualitative criteria, including the existence of a payment more than 30 days past due, the classification of the contract as at-risk, the identification of forbearance exposure or the inclusion of the portfolio on a Watchlist;
- exposures rated by the large corporates, banks and specialized financing software tool are also downgraded to Stage 2 depending on the sector rating and the level of country risk.

Exposures for which there is objective evidence of impairment loss due to an event representing a counterparty risk and occurring after initial recognition will be considered as impaired and classified as Stage 3. Identification criteria for impaired assets are similar to those under IAS 39 and are aligned with the default criterion. The accounting treatment of restructuring operations due to financial hardships is similar to their treatment under IAS 39.

The expected credit losses on Stage 1 or Stage 2 financial instruments are measured as the product of several inputs:	• cash flows expected over the lifetime of the financial instrument, discounted at the valuation date – these flows are determined according to the characteristics of the contract, its effective interest rate and the level of prepayment expected on the contract; • loss given default (LGD); • probabilities of default (PD), for the coming year in the case of Stage 1 financial instruments and until the contract's maturity in the case of Stage 2 financial instruments.

The Group draws on existing concepts and mechanisms to define these inputs, and in particular on internal models developed to calculate regulatory capital requirements and on projection models used in the stress test system. Certain adjustments are made to comply with the specifics of IFRS 9.

IFRS 9 inputs:	• aim to provide an accurate estimate of expected credit losses for accounting provision purposes, whereas prudential inputs are more cautious for regulatory framework purposes. Several of the safety buffers applied to prudential inputs are therefore restated; • shall allow expected credit losses to be estimated until the contract's maturity, whereas prudential inputs are defined to estimate 12-month expected losses. 12-month inputs are thus projected over long periods; • shall be forward-looking and take into account the expected economic environment over the projection period, whereas prudential inputs correspond to through-the-cycle estimates (for PD) or downturn estimates (for LGD and the flows expected over the lifetime of the financial instrument). Prudential PD and LGD inputs are therefore also adjusted to reflect forecasts of future economic conditions.

Inputs are adjusted to economic conditions by defining three economic scenarios over a three-year period. The variables defined in each of these scenarios allow for the distortion of the PD and LGD inputs and the calculation of an expected credit loss for each economic scenario. Projections of inputs for periods longer than three years are based on the mean reversion principle. The models used to distort the PD and LGD inputs are based on those developed for the stress test system for consistency reasons.

The models for calculating the various parameters used to calculate provisions (PD, LGD, segmentation, etc.) are regularly updated to ensure that they maintain their accuracy, meet the regulator's expectations and more generally to improve their relevance.

The economic scenarios are associated with probabilities of occurrence, making it possible to calculate the average probable loss, which is used as the IFRS 9 impairment amount.

These scenarios are defined using the same organization and governance as those defined for the budget process, requiring an annual review based on proposals from the Economic Research department. For consistency purposes, the baseline scenario serves as the budget scenario. Two variants – an optimistic view and a pessimistic view – are also developed around this scenario. The probability of occurrence of each scenario is reviewed on a quarterly basis by the Group Watchlist and Provisions Committee. The inputs thus defined are used to measure expected credit losses for all rated exposures, whether they were subject to the IRB or the standardized approach for the calculation of risk-weighted assets. For unrated exposures (insignificant for Groupe BPCE), prudent valuation rules are applied by default.

The IFRS 9 input validation process is fully aligned with the Group's existing model validation process. The validation of the parameters follows a review process by an independent internal model validation unit, then the review of this work is presented to the Group Model Committee. Finally, quarterly monitoring of recommendations by the Group Model Committee has replaced annual monitoring.

5.1.2.3 FORBEARANCE, PERFORMING AND NON-PERFORMING EXPOSURES

Forbearance results from the combination of a concession and financial hardships, and may involve performing or non-performing loans. Forced restructuring, over indebtedness proceedings, or any kind of default as defined by the Group standard, which involves a forbearance measure as previously defined, results in classification as a non-performing forborne exposure.

The identification of these situations is based on an expert's guide to the qualification of forbearance situations, in particular on short, medium and long-term financing of non-retail counterparties.

A permanent control system covering forbearance situations relating to non-retail exposures completes the system.

5.2 Risk measurement and internal ratings

Current situation

BPCE12 – SCOPE OF STANDARDIZED AND IRB METHODS USED BY THE GROUP

	12/31/2022				
Customer segment	**Banque Populaire retail banking network**	**Caisse d'Epargne retail banking network**	**Crédit Foncier/Banque Palatine/BPCE International subsidiaries**	**Natixis**	**BPCE SA**
Central banks and other sovereign exposures	IRBF	Standard	Standard	IRBA	IRBF
Central administrations	IRBF	Standard	Standard	IRBA	IRBF
Public sector and similar entities	Standard	Standard	Standard	Standard	Standard
Institutions	IRBF	Standard	Standard	IRBA/Standard	IRBF
Corporates (Rev.[1] > €3m)	IRBF/Standard	IRBF/Standard	Standard	IRBA/Standard	Standard
Retail	IRBA	IRBA	Standard	Standard	

(1) Rev.: revenues.

The Oney subsidiary is approved for credit models applicable to retail customers in France. The Portugal, Spain, Russia, Hungary and Poland scopes use the standardized approach.

The BPCE Financement subsidiary is using the IRB approach on part of its portfolio.

BPCE13 – EAD BREAKDOWN BY APPROACH FOR THE MAIN CUSTOMER SEGMENTS

	12/31/2022			12/31/2021		
	EAD			EAD		
in %	**Standard**	**IRBF**	**IRBA**	**Standard**	**IRBF**	**IRBA**
Central banks and other sovereign exposures	28%	55%	18%	26%	56%	18%
Central administrations	41%	30%	29%	39%	34%	27%
Public sector and similar entities	98%	0%	2%	99%	0%	1%
Institutions	45%	9%	46%	49%	9%	42%
Corporate customers	39%	24%	37%	39%	23%	39%
Retail	8%	0%	92%	9%	0%	91%
TOTAL	**29%**	**19%**	**52%**	**29%**	**19%**	**52%**

Rating system

Internal rating system models are developed based on historical data for observed defaults and losses. They are used to measure the credit risks to which Groupe BPCE is exposed, expressed as a one-year probability of default (PD), as a Loss Given Default (LGD) and as Credit Conversion Factors (CCF), depending on the characteristics of the transactions.

These internal rating systems are also applied to risk supervision, authorization systems, internal limits on counterparties, etc., and may also serve as a basis for other processes, such as statistical provisioning.

The resulting risk metrics are then used to calculate capital requirements, once they have been validated by the supervisory authority in compliance with regulatory requirements.

Internal rating system governance

The internal governance of rating systems is centered on the development, validation, monitoring and modification of these systems. Groupe BPCE's Risk division works independently throughout the Group (Banque Populaire and Caisse d'Epargne networks, Natixis, and other subsidiaries) to review the performance and appropriateness of credit and counterparty risk models, as well as structural balance sheet risks, market risks, and non-financial risks, including operational risks. In performing this duty, the Group Risk division relies on robust governance defined as part of the Model Risk Management (MRM) system.

The Group has defined and launched a Model Risk Management (MRM) system to assess, reduce, monitor and communicate on model risk. Implementation of the new system is subject to an independent control presenting a high level of consistency. The principles of the system deal with the documentation, design, development, implementation, review, approval, ongoing supervision and use of models, all in the interest of ensuring their dependability. An MRM risk management policy has been defined for this purpose. This policy must promote an informed knowledge of how each model works, how it is used, its strengths, weaknesses and limitations. The policy is supplemented by a body of procedures defining the tools for monitoring the performance of the models, in particular the validation review, the monitoring of recommendations and the associated escalation processes, and the monitoring of the model portfolio through an inventory. The system is based on a specific tool deployed in Q4 2021 which manages the life cycle of the models. A Model Risk Management Committee is dedicated to the governance of the models.

As part of the project to merge the support functions between BPCE SA and Natixis, the Model Risk Management teams of the Natixis Risk department joined the Group Risk division on March 1, 2022. These teams are the "Risk Model Validation" team in charge of validating credit, market, counterparty and compliance risk models, the "Valuation Model Validation" team in charge of validating front office valuation models, and the "Model Governance Wholesale Banking" team in charge of the governance of models from the Natixis scope.

The Group's validation process encompasses all types of quantitative models, and defines and specifies the duties and responsibilities of contributors involved throughout each model's life cycle. A specific procedure defines the conditions for delegating validation, within a specific scope, to another entity besides the Group Risk division validation team: the entity in question must have the necessary expertise, be independent of the team developing the model, and have appropriate validation governance. The delegation is subject to the approval of the Model Risk Management Committee.

The internal validation process for new models or for changes to existing models is broken down into three steps:

1/ review of the model and its adequacy, conducted independently of the entities having worked on the development of the model. The Group Risk division's validation teams report to departments that are independent of the modeling teams;

2/ review for a model of the Group's retail entities by the Group Model Committee, composed of quantitative (modelers and validators) and business experts, who provide a technical opinion on the model. This committee is chaired by the Head of Risk Management, Deputy Chief Executive Officer and member of the Executive Management Committee;

or a review for a model specific to the scope of GFS by a Model Oversight Committee (MOC) composed of quantitative (modelers and validators) and business experts, who provide a technical opinion on the model. This committee is chaired by the Head of the Model Risk Management and Wholesale Banking Validation department;

3/ validation by the Umbrella Committee (Risk, Compliance and Permanent Control Committee or Model Risk Management Committee), based on the technical opinion of the functional committee (Group Model Committee or Model Oversight Committee), which decides on the implementation of the necessary changes, particularly in processes and operational implementation. These changes are submitted, where applicable, to the European supervisory authority for prior approval, in accordance with regulations 529/2014 and 2015/942 on the monitoring of internal models used in determining capital requirements.

After the completion of this governance process, internal control reports and statements of decisions are made available to Group management (and supervisory authorities for internal models used to determine capital requirements). Each year, a summary of the performances and adequacy of internal models is presented to the Risk Committee of the Group Supervisory Board.

Model development process

The Group Risk division relies on a formalized process describing the main steps taken in developing any new model. This document, which serves as a guide for the entire documentation and validation process, is based on:

- a literary and general description of the model, indicating its scope of application (counterparty type, product type, business line, etc.), the main assumptions on which it is based, and any aspects not covered;
- a descriptive diagram summarizing how the ultimately chosen model works, indicating the various inputs, processes and outputs;
- a detailed description of the modeling steps and approach;
- a literary description of the model's main risk factors.

The internal models developed must meet demanding criteria in terms of risk discrimination and qualification and be assessed by the modeling teams as part of the procedure for assessing the model of the MRM system described above.

These models incorporate the regulatory changes enacted by the European Banking Authority under its IRB Repair program, aimed at improving the comparability of risk parameters input to the models.

Review of internal ratings-based models

The Groupe BPCE Risk division is responsible for reviewing the Group's internal models whenever a new model is being developed or an existing model changed. It also performs the annual review of backtests on credit, market and Asset/Liability management risk models.

The validation team conducts independent analyses in compliance with a charter and procedures that describe interactions with the modeling entities and the steps of the review. This review is based on a set of qualitative and quantitative criteria, and addresses the following seven points:

- data and parameters used by the model: analysis of the quality and representativeness of the data, the integrity of the controls, the error reports, the completeness of the data, etc.;
- methodology and design: analysis of the theory underlying the model, analysis of approximations, calibration methods, risk indicators, aggregation rules, model benchmarking, accuracy and convergence analysis;
- permanent monitoring: the validation team ensures the existence of a monitoring methodology for the model and assesses the risk associated with the implementation of this methodology;
- model performance: assessment of the risk related to the performance of the model both during the design phase and periodically;
- IT development: counter-implementation, code analysis, tests;
- documentation: analysis of the quality and completeness of the methodological documentation received relating to modeling, IT code, model monitoring, data, model governance and IT development;
- governance of the model: assessment of the model's compliance with the Bank's internal standards throughout the model's life cycle.

The level of detail in the review is adjusted for the type of work examined. In any event, it must at least include a document review focusing on the quantitative aspects of rating systems. For a new model or a major change to an existing model, in addition to this review, the computer codes are checked and additional tests are run (comparative calculations).

In conclusion, the review provides an opinion on the validity of the models and the associated parameters. It also generates an opinion on compliance with prudential regulations. Where necessary, the review is accompanied by recommendations.

Finally, as a second line of defense, the model validation team performs an assessment of the model as part of the previously described MRM system.

Model mapping

The Group Risk division maps out all Group internal rating models, clearly indicating their scope in terms of Group segments and entities, as well as their main features, including a general score derived from the annual model review characterizing the performance and freshness of each model (age/year of development). This is now part of the Model Risk Management system.

The system has been enhanced by new models approved by the ECB that are being implemented. The models in question are PD rating models for "individual retail" customers and LGD estimation models for "individual retail" and "professional retail" customers. The new methodology for PD rating models aims to improve predictive power over customers without payment incidents. The new LGD calculation methodology aims to distinguish losses in the event a customer is downgraded to "disputed" (material loss) from losses in the event a customer is quickly restored to "performing" status (non-material loss stemming primarily from admin costs).

Other work has also been carried out on overhauling the rating models for "professional retail" customers and on estimating exposure at default (EAD) and loss given default (LGD) for "individual and professional retail" customers, in particular in order to meet the new regulations coming into force in 2022. The models developed in 2018 were approved by the supervisor in 2019 while the new models are pending approval. BPCE Financement has redesigned its models to cover its entire portfolio of revolving loans (pending approval). In 2022, the ECB carried out a certification mission of these new models for the BPCE Financement revolving loan. The overhaul of the models for medium-sized business customers (revenue between €10 million and €500 million) resulted in approval by the ECB in 2022. *Ex-ante* information was provided to the ECB following the overhaul of the rating scale for large corporates (revenue in excess of €1 billion) and the rating methodologies of banks. A two-month *ex-ante* notification relating to the new "Banking Institutions" model was sent to the ECB following the overhaul of the OECD/non-OECD bank rating methodologies. Other methodological changes (*i.e.* grouped rating procedure for specialized lending and new matrix of links relating to the method for assessing the link between subsidiaries and their parent company) will also be submitted very soon in the form of a two-month *ex-ante* notification in 2022. Work to overhaul the TRR rating methodologies for large corporates and holding companies is underway with the aim of delivery to the validation division at the end of December 2023 and submission to the ECB in 2024.

The Oney subsidiary has been approved for retail customer credit models in France, with work underway to overhaul the system. The Portugal, Spain, Russia, Hungary and Poland scopes use the standardized approach.

The following table lists the internal credit models used by the Group for risk management purposes and, where authorized by the supervisor, to calculate capital requirements for the Banque Populaire and Caisse d'Epargne networks, Natixis and its subsidiaries, Crédit Foncier and Banque Palatine.

Exposure class	Portfolio	Number of PD (Probability of Default) models	Description/ Methodology	Portfolio	Number of LGD (Loss Given Default) models	Description/ Methodology	Number of CCF/EAD (exposure at default)	Description/ Methodology
Sovereigns, central governments and central banks	Sovereigns and affiliates	1	Expert criteria including quantitative and qualitative variables/economic and descriptive variables	Sovereigns and affiliates	1	Expert criteria including quantitative and qualitative variables	1	Application of regulatory inputs
			Portfolio with low default risk					
	Multilateral development banks	1	Expert criteria					
			Portfolio with low default risk					
Public sector	Municipalities (communes), departments, regions, social housing agencies, hospitals, etc.	10(NA[1])	Expert criteria/statistical modeling (logistic regression)					
			Portfolio with low default risk					
Institutions	OECD or non-OECD banks, brokers/dealers	3	Expert criteria	Banks	1	Expert criteria including quantitative and qualitative variables	1	Application of regulatory inputs
			Portfolio with low default risk					
Corporate customers	Large corporates (Rev. > €1 billion)	5	Expert criteria including quantitative and qualitative variables, depending on the business sector					
			Portfolio with low default risk					
	Small and medium-sized companies (Rev. > €3 million)	9 (o/w 2 NA)	Statistical models (logistic regression) or flat scores, on companies publishing parent company or consolidated financial statements, mainly based on balance sheet data depending on the business sector, and banking behavior/history	Other contracts (general, property investment companies, etc.)	7 (o/w 3 NA)	Models based on estimated losses, segmented by type of contract and guarantee, or expert criteria	2 (o/w 1 NA)	Conversion factors, segmented by type of contract
	Non-profits and Insurance companies	2	Expert criteria including quantitative and qualitative variables	Leasing	1	Models based on estimates of asset resale conditions, segmented by type of asset financed		
			Portfolio with low default risk					
	Specialized financing (real estate, asset pool, aircraft, etc.)	8 (o/w 1 NA)	Expert criteria based on features of financed goods/projects	Specialized financing (real estate, asset pool, aircraft, etc.)	5	Models based on estimates of asset resale conditions or future cash flows		
			Portfolio with low default risk					
Retail	Individual customers	7	Statistical models (logistic regression) including behavioral and socioeconomic variables, differentiated by customer profile	Residential real estate	3 (o/w 1 NA)	Models based on estimated losses, segmented by type of contract and guarantee	3 (o/w 1 NA)	Conversion factors, segmented by type of contract
	Professional customers (socioeconomic category differentiated according to certain sectors)	10	Statistical models (logistic regression) including balance sheet and behavioral variables					
				Other individual and professional customers	2	Models based on estimated losses, segmented by type of contract and guarantee	2	Conversion factors and flat-rate values, segmented by type of contract
	Residential real estate	5 (o/w 2 NA)	Statistical models (logistic regression) including behavioral and socioeconomic variables, or project description variables (quota, etc.), differentiated by customer profile	Leasing	2	Models based on estimates of asset resale conditions, segmented by type of asset financed		
	Revolving loans	2	Statistical models (logistic regression) including behavioral and socioeconomic variables	Revolving loans	2	Models based on estimated losses, segmented by type of contract	2	Conversion factors, segmented by type of contract

(1) NA refers to models not yet approved for the determination of capital requirements.

INTERNAL RATINGS-BASED APPROACHES – RETAIL CUSTOMERS

For retail customers, Groupe BPCE has established standardized internal ratings-based methods and centralized ratings applications used to assess the credit quality of its loan books for better risk supervision. For the Banque Populaire and Caisse d'Epargne networks, they are also used to determine capital requirements under the Advanced IRB method.

The probability of default of retail customers is modeled by the Risk division, based in large part on the banking behavior of the counterparties. The models are segmented by type of customer, distinguishing between individual and professional customers (with or without balance sheets) and according to products owned. The counterparties in each segment are automatically classified using statistical models (usually logistic regression models) into similar and statistically separate risk categories. Probability of default is estimated for each of these categories, based on the observation of average default rates over the longest period possible so as to obtain a period representative of the possible variability of the observed default rates. These estimates are systematically adjusted by applying margins of conservatism to cover any uncertainties. For comparison purposes, risk reconciliation is carried out between internal ratings and agency ratings.

Loss given default (LGD) is an economic loss measured by incorporating all inherent factors in a transaction as well as the costs incurred during the collection process. LGD estimation models for retail customers are applied specifically to each network. LGD values are first estimated by product, and based on whether or not any collateral has been provided. Other factors may also be considered secondarily, where they can be used to statistically distinguish between degrees of loss. The estimation method employed is based on the observation of marginal collection rates, depending on how long the customer has been in default. The advantage of this method is that it can be directly used to estimate LGD rates applied to performing loans and ELBE rates applied to loans in default. Estimates are based on internal collection histories for exposures at default over an extended period. Two margins of conservatism are then systematically added: the first to cover estimate uncertainties and the second to mitigate any economic slowdown effect.

Groupe BPCE uses two models to estimate EAD. The first estimates a Credit Conversion Factor (CCF) for off-balance sheet exposures. This model is automatically applied when off-balance sheet exposures are deemed material (*i.e.* exceeding the limits set for each type of product). The second estimates a flat increase in the balance sheet for non-material off-balance sheet exposures.

INTERNAL RATINGS-BASED APPROACHES – NON-RETAIL CUSTOMERS

Groupe BPCE has comprehensive systems for measuring non-retail customer risks, using either the Foundation IRB or Advanced IRB approach depending on the network and the customer segment. These systems can also be used to assess the credit quality of its loan books for better risk supervision.

The rating system consists in assigning a score to each counterparty. Given the Group's cooperative structure, a network of officers is responsible for determining the customer's rating for the Group based on the uniqueness of the score. The score assigned to a counterparty is usually suggested by a model, then adjusted and validated by Risk function experts after they perform an individual analysis. This process is applied to the entire Non-Retail portfolio, except the new models reserved for Small Enterprises (SEs), which are automatically rated (as with the Retail portfolio). The counterparty rating models are mainly structured according to the type of counterparty (corporates, institutions, public sector entities, etc.) and size of the company (measured by its annual revenues). When volumes are sufficient (SMEs, ISEs, etc.), the models rely on statistical modeling (logistic regression methods) of customer defaults, combined with qualitative questionnaires. Failing that, grids built by experts are used. These consist of quantitative elements (financial ratios, solvency, etc.) derived from financial data and qualitative elements assessing the customer's economic and strategic dimensions. With respect to country risk, the system is based on sovereign ratings and country ratings that limit the ratings that can be given to non-sovereign counterparties. The Non-Retail rating scale is built using past Standard & Poor's ratings to ensure the direct comparability in terms of risks with the rating agencies. For the new SE models, specific scales were defined for each model used to perform regulatory calculations. These scales are connected with the Non-Retail rating scale for internal risk management. For statistical models, the calibration of probabilities of default on the scales defined for regulatory calculations is based on the same principles as those set out for retail customers (in particular the historic representation of default rates, as well as the estimation of uncertainty margins).

LGD models (excluding retail customers) are predominantly applied by type of counterparty, type of asset, and whether or not any collateral has been provided. Similar risk categories are then defined, particularly in terms of collections, procedures and type of environment. LGD estimates are assessed on a statistical basis if the number of defaults is high enough (*e.g.* for the Corporate customers asset class). Past internal data on collections covering the longest possible period are used. If the number of defaults is not high enough, external databases and benchmarks are used to determine expert rates (*e.g.* for banks and sovereigns). Finally, some values are based on stochastic model, for loans in collection. Downturn LGD is checked and margins of conservatism are added if necessary.

Groupe BPCE uses two models to estimate EAD for corporates. The first estimates a Credit Conversion Factor (CCF) for off-balance sheet exposures. This model is automatically applied when off-balance sheet exposures are deemed material (*i.e.* exceeding the limits set for each type of product). The second estimates a flat increase in the balance sheet for non-material off-balance sheet exposures.

The rating methodologies for low-default portfolios are expert-based; qualitative and quantitative criteria (corresponding to the characteristics of the counterparty to be rated) are used to link the counterparty to a score and a rating, which is then linked to a PD. This PD is based on observation of external default data, but also on internal rating data. A PD range cannot be quantified due to the low number of internal defaults.

STANDARDIZED APPROACH

The “risk measurement and internal ratings” section describes the various approved models used by Groupe BPCE for the different exposures classes. Where the Group does not have an internal model authorized for use in determining capital requirements for a given exposure class, they have to be estimated based on corresponding inputs under the standardized approach. These inputs are based in particular on the credit assessments (ratings) performed by rating agencies recognized by the supervisory authority as meeting ECAI (External Credit Assessment Institutions) requirements, such as Moody’s, Standard & Poor’s, Fitch Ratings and Banque de France for Groupe BPCE.

In accordance with Article 138 of regulation No. 575/2013 (Capital Requirements Regulation or CRR) on prudential requirements for credit institutions and investment firms, where a counterparty has been rated by several rating agencies, the counterparty’s rating is determined on the basis of the second highest rating.

When an external credit rating directly applicable to a given exposure is required and exists for the issuer or for a specific issuance program, the procedures used to determine the weighting are applied in accordance with CRR Article 139.

For fixed-income securities (bonds), short-term external ratings of the bond take precedence over external ratings of the issuer. If there are no external ratings for the bond, the issuer’s long-term external rating is taken into account for senior debt only, except in the specific case of exposure to institutions whose risk weight is derived from the credit rating of the sovereign country in which it is established.

BACKTESTING

All three credit risk inputs are subject to yearly backtesting in order to verify the performance of the rating system. More specifically, backtesting is aimed at measuring the overall performance of models used, primarily to ensure that the model’s discriminating power has not declined significantly relative to the modeling period.

Observed default rates are then compared with estimated default rates for each rating. Ratings are checked for through-the-cycle applicability. More specifically, for portfolios with low default rates (large corporates, banks, sovereigns and specialized financing), a detailed analysis is carried out using additional indicators, including more qualitative analyses among other things.

The scope of LGD default values is consistent with the values observed, *i.e.* limited exclusively to exposures at default. Estimated values therefore cannot be directly compared with LGD values measured in the outstanding portfolio. Downturn LGDs are also verified.

Backtesting results may call for the implementation of action plans if the system is deemed not sufficiently prudent or effective. The backtesting results and the associated action plans are discussed by the Group Models Committee, then reviewed by the RCCP Standards and Methods Committee (see governance of the internal rating system).

On the basis of these exercises, the rating system has been deemed satisfactory overall in terms of effective risk management. Moreover, the calibrations of risk parameters remain conservative on the whole, relative to actual risk observations.

REPORTS ON CREDIT RISK MODELS

Since the Single Supervisory Mechanism (SSM) was implemented in 2014, the European Central Bank (ECB) has been working to strengthen governance of internal model supervision through various investigations.

These include the TRIM (Targeted Review of Internal Models), aimed at assessing the regulatory compliance of internal models specifically targeted by the ECB. To that end, TRIM investigations are based on a set of standardized inspection methodologies and techniques, which the teams mandated by the ECB use on-site. BPCE was subject to TRIM reviews covering several scopes of operation from December 2016 to May 2018, giving rise to reports prepared by the ECB: a TRIM General Topics, then three specific reviews targeting internal credit risk models (one on the Corporate portfolio and two on the Retail portfolios). As a result, several new initiatives were launched with the aim of further improving the existing system.

The European Central Bank is continuing its investigations through IMI (Internal Model Investigation). Three reviews were carried out in 2021 and 2022: two on the Retail models, in particular on the review of the PD Professional system, and one on the corporate PD models for small companies and for companies with revenue between €10 million and €500 million (high segment). The latter resulted in a report from the supervisor and an authorization received at the end of July 2022; decisions on the two Retail missions are expected for the first half of 2023.

In 2021, significant work was carried out on the Corporate portfolio, both on the review of the PDs of certain specific populations (real estate companies, non-financial holding companies and associations) by capitalizing in particular on the Small Business and High Segment models to file an application for IRBA approval on the BP and CE networks with new LGD/EAD models. Following this work, material change files were submitted to the ECB in June 2022.

IMPACTS ON THE AMOUNT OF GUARANTEES THE INSTITUTION IS REQUIRED TO GIVE IN THE EVENT ITS CREDIT RATING IS DOWNGRADED

The CRR2 and the Delegated act require institutions to report to the competent authorities any contracts the conditions of which lead to additional liquidity outflows following a material deterioration of the credit quality of the institution (*e.g.* a downgrade in its external credit assessment by three notches). The institution shall regularly review the extent of this deterioration in light of what is relevant under the contracts it has entered into and shall notify the result of its review to the competent authorities (CRR 423.2/AD 30.2).

The competent authorities decide the weighting to be assigned to contracts deemed to have a material impact.

For contracts containing early exit clauses on master agreements (framework agreements between the bank and a counterparty for OTC derivative transactions without collateral), the early termination clause allows one counterparty to terminate the contract early following the deterioration of the credit quality of the other counterparty. Accordingly, the number of early terminations generated by credit quality deterioration shall be estimated.

It was agreed that the Group would measure outflows generated by reviewing all the Group's master agreements or credit support annexes on the OTC market, in order to assess the amount of the deposit/collateral required following a downgrade of three notches in the institution's long-term credit rating by three rating agencies (Moody's, S&P, Fitch). The calculation also includes the amount of the deposit/collateral required following a downgrade of one notch in the institution's short-term credit rating, with the Group considering such a downgrade inevitable if the institution's LT credit rating is downgraded three notches.

At Groupe BPCE level, the calculation covers BPCE SA, Natixis, Crédit Foncier and their funding vehicles: BP CB, GCE CB, BPCE SFH, FCT HL, SCF and VMG. Some intragroup contracts generate outflows at the individual institution level, but are neutralized at the Groupe BPCE consolidated level.

The Group uses a conservative approach in its calculation:

- the impact for each contract is the maximum amount between the three rating agencies between a 1-notch downgrade in the ST rating and a 3-notch downgrade in the LT rating;
- the amount of ratings triggers reported is the sum of all impacts of a 1-notch downgrade in the ST rating and a 3-notch downgrade in the MLT rating;
- the assumption is made that all external ratings are downgraded simultaneously by the three agencies and for all rated entities;
- as the national competent authority has not issued a recommendation, a weighting of 100% is applied to reported outflows for the calculation of the LCR.

5.3 Use of credit risk mitigation techniques

Credit risk mitigation techniques are widely used within the Group and are divided into real guarantees and personal guarantees.

A distinction is made between guarantees having an actual impact on collections in the event of hardships and guarantees recognized by the supervisory authority in the weighting of exposures used to reduce capital consumption. For example, a personal and joint guarantee provided in due form by a company director who is a customer of the Group, and collected in accordance with regulations, may be effective without being eligible as a statistical risk mitigation factor.

In some cases, the Group's institutions choose, in addition to employing risk mitigation techniques, to take opportunities to sell portfolios of disputed loans, particularly when the techniques used are less effective or non-existent.

Credit derivatives are also used to reduce risks, and apply almost exclusively to the Corporate customers asset class (and mainly Natixis).

Definition of guarantees

A real guarantee involves one or more solidly measured movable or immovable assets that belong to the debtor or a third party. This guarantee consists of granting the creditor a real right to said asset (mortgage, pledge of real property, pledge of listed liquid securities, pledge of listed liquid merchandise with or without divestiture, pledge, third party guarantee, etc.).

The effect of this collateral is to:

- reduce the credit risk incurred on an exposure, given the rights of the institution subject to exposure, in the event of default or other specific credit events affecting the counterparty;
- obtain the transfer of ownership of certain amounts or assets.

A personal guarantee is collateral that reduces the credit risk on an exposure, due to the commitment provided by a third party to pay a set amount if the counterparty defaults or due to any other specific event.

Accounting recognition under the standardized or IRB approach

Under the standardized approach:	Under the IRB approach:	For retail customers under the IRB approach:
Personal guarantees and real guarantees are accounted for, subject to eligibility, using an enhanced weighting of the guarantee portion of the exposure. Real guarantees such as cash or liquid collateral are deducted from the gross exposure.	Excluding retail customers, real guarantees are taken into account, subject to eligibility, by decreasing the Loss Given Default applicable to the transactions. Personal guarantees are recognized, subject to eligibility, by substituting a third party's PD with that of a guarantor.	Personal and real guarantees are taken into account, subject to eligibility, by decreasing the Loss Given Default applicable to the transactions.

Conditions for the recognition of guarantees

Articles 207 to 210 of regulation (EU) 2019/876 of May 20, 2019 amending regulation (EU) 575/2013 set out the conditions for the recognition of guarantees, in particular:

- the credit quality of the obligor and the value of the collateral shall not have a material positive correlation. Securities issued by the obligor shall not qualify as eligible collateral;
- the institution shall properly document the collateral arrangements and have in place clear and robust procedures for the timely liquidation of collateral;
- the institution shall have in place documented policies and practices concerning the types and amounts of collateral accepted;
- the institution shall calculate the market value of the collateral, and revalue it accordingly, whenever it has reason to believe that a significant decrease in the market value of the collateral has occurred.

The division of risks is a credit risk mitigation technique. In practice, individual or topical caps and limits are defined, thus reducing the bank's sensitivity to risks deemed excessive, either individually or industry-wide, in the event of a major incident.

Risk supervision activities may be implemented to reduce exposure to a given risk if it is deemed too high. They also contribute to effective division of risks.

Division of risks

The division of risks is a credit risk mitigation technique. It is reflected in the individual or topical limit systems and helps reduce each institution's sensitivity to risks considered either individually or sectorally to be too significant to carry in the event of major incidents.

Guarantors

The Banque Populaire network has historically used professionals and Mutual Guarantee Companies (such as SOCAMAs, which guarantee loans to craftsmen) to secure its loans, in addition to the real guarantees used.

For loans to individual customers, it also turns to CASDEN Banque Populaire (and primarily its Parnasse Garanties structure) to back loans to all civil servants, to Crédit Logement and increasingly to Compagnie Européenne de Garanties et de Cautions (CEGC, a subsidiary of BPCE SA).

For home loans, the Caisse d'Epargne network mainly calls on CEGC, *FGAS (Fonds de garantie à l'accession sociale à la propriété)* and, to a lesser extent, Crédit Logement (a financial institution and a subsidiary of most of the main French banking networks). These institutions specialize in the provision of guarantees for bank loans (predominantly home loans).

FGAS offers guarantees from the French government for secured loans. Loans covered by FGAS guarantees granted before December 31, 2006 are given a 0% risk weigh, and loans covered by guarantees granted after that date have a risk weight of 15%.

For their home loans, the Banque Populaire and Caisse d'Epargne networks also use several mutual insurers, such as MGEN, Mutuelle de la Gendarmerie, etc.

For professional and corporate customers, the entire Group still uses Banque Publique d'Investissement, while calling on the European Investment Fund or European Investment Bank for guarantee packages in order to substantially reduce credit risk.

In some cases, organizations such as Auxiga are used for the seizure of inventory and the transfer of its ownership to the bank as collateral for commitments made in the event of financial hardships.

Finally, on an occasional basis, Natixis purchases credit insurance for certain transactions and in some circumstances, from private (SCOR) or public (Coface, Hermes, other sovereign agencies) reinsurance companies, while also making use of Credit Default Swaps (CDS).

In light of the Covid crisis, the French government allowed its guarantee to be used within the scope of the SGLs granted. Groupe BPCE used this option.

Credit derivatives serving as currency or interest rate hedges are entrusted to approved clearing houses in Europe or the US for Natixis operations in this country.

Concentration of collateral volumes

By type of guarantor:	• for home loan exposures, most collateral takes the form of mortgages (risk diversified by definition, bank better protected by basing credit approval decisions on customer income), insurance-oriented guarantees such as those provided by CEGC (a subsidiary of Groupe BPCE, subject to regular stress testing), Crédit Logement (providing guarantees to multiple banks subject to the same constraints), FGAS (controlled by the French State, considered equivalent to sovereign risk). The CASDEN guarantee, issued to government employees, currently offers solid resilience according to a model based on the robust income of this particular customer base; • for professional customer exposures, the most common guarantees are those provided by the Banque Publique d'investissement (BPI), subject to strict formal constraints, and mortgages. Guarantees provided by institutions such as SOCAMAs, whose solvency depends on the credit institutions of Groupe BPCE, are also used; • for corporate customers, the main guarantees used are Banque Publique d'Investissement mortgages and guarantees.
By credit derivative providers:	• the regulations require the use of clearing houses for interest rate risk on the new flow. This security does not, however, cover the counterparty default risk, which is a granular risk. Volumes of collateral provided by clearing houses are gradually on the rise, generating a regulated and supervised risk; • the currency risk is hedged at the level of each contract with the introduction of margin calls at a frequency appropriate to the risk. These transactions are matched to interbank counterparties specializing in this type of transaction, within the framework of individual limits authorized by the Group Credit Committee and counterparties.
By credit sector:	• Groupe BPCE has established sector-specific mechanisms to guide the guarantee policy based on the business sector in question. Appropriate recommendations are issued to the institutions.
By geographic area:	• Groupe BPCE is mainly exposed to France and, *via* Natixis, to other countries to a lesser extent. As a result, most guarantees are located in France.

Valuation and management of collateral comprising real guarantees

Groupe BPCE has an automatic valuation tool for real-estate guarantees available to all its networks.

Across the Banque Populaire network, in addition to real guarantees, the valuation tool also takes into account pledges of vehicles, equipment and tools, pleasure craft, and business assets.

The Caisse d'Epargne network uses the revaluation engine for real estate guarantees in all its risk segments.

Within the Group, the guarantees from Mutual Guarantee Companies recognized as providers of sureties considered equivalent to mortgages by the supervisory body are subject to a credit insurance valuation.

An enhanced Group valuation process was established to measure real estate guarantees above certain amounts. The certification obtained by BPCE Solutions immobilières (formerly Crédit Foncier Expertise), a subsidiary of BPCE since the decision was made to place CFF under run-off management, strengthens the Group's synergies.

Guarantees other than those referred to above are assessed and validated on the basis of a systematic valuation, either according to market value where the guarantees are quoted on liquid markets (e.g. listed securities), or based on expert opinion demonstrating the value of the guarantee used to hedge risks (e.g. the value of recent transactions on aircraft or ships according to their characteristics, the value of commodity holdings, the value of a pledge given on merchandise, or the value of a business based on its location, etc.).

Key Lessons from permanent control

The Group Credit Risk department works with other departments of the Group Risk division to coordinate, standardize, manage and monitor the credit risk management system. Monitoring, based on a risk-based approach, covers:

- adequate coverage of credit risks by controls based in particular on the assessment of credit risks in the macro-risk mapping;
- the definition of level 2 controls common to the basic credit risk base (control of transactions and/or control of internal procedures);
- the use of the results of level 1 and level 2 controls covering credit risks in main risk and reporting to the *Ad Hoc* Committees;
- the definition, implementation and monitoring of Group action plans in conjunction with all stakeholders.

According to the principle of subsidiarity, the local Risk divisions are responsible for compliance with the permanent control system (deployment, implementation, analysis of results and action plans).

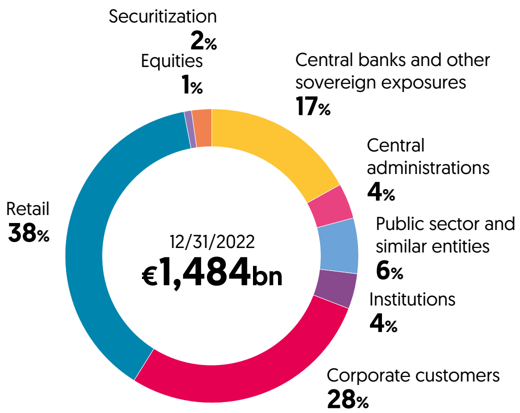
The scope of permanent level 2 controls relating to credit risks covers the process of granting the various asset classes and specific risk pockets. This corpus of controls was supplemented in 2022 with new controls linked to changes in standards or new processes (Forbearance, etc.).

5.4 Quantitative disclosures

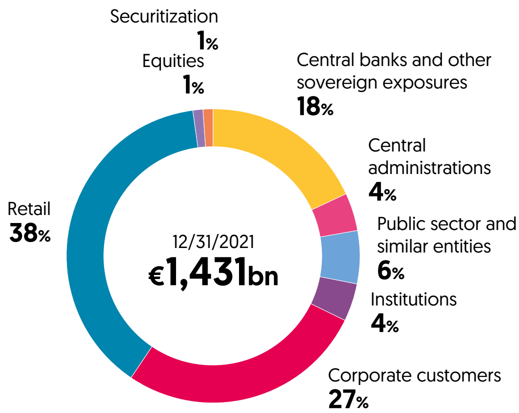
Credit risk exposure

PORTFOLIO BREAKDOWN BY EXPOSURE CLASS (EXCLUDING OTHER ASSETS)

12/31/2022



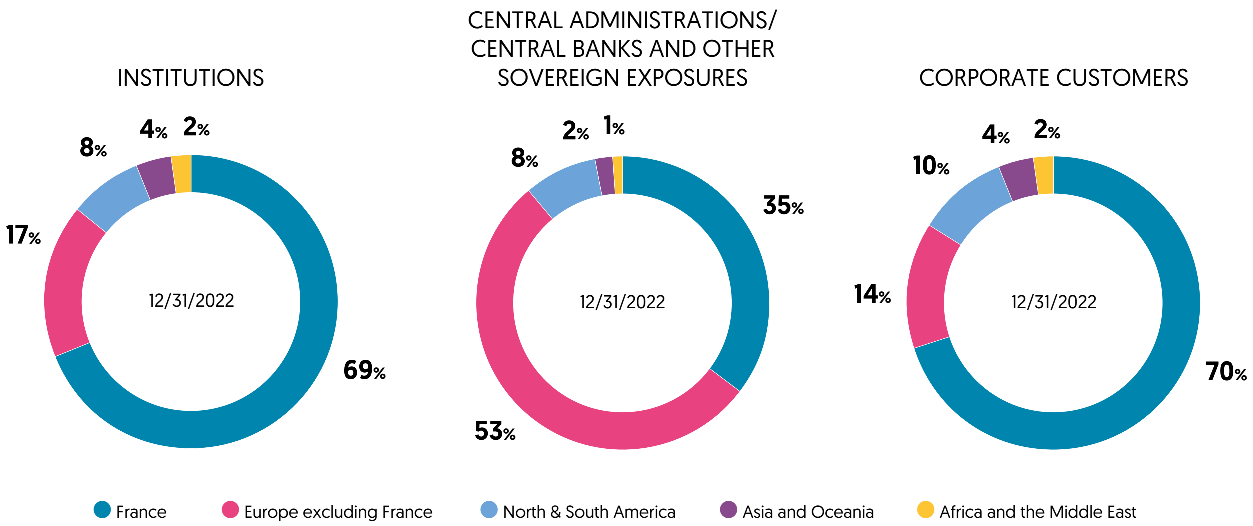
12/31/2021



Groupe BPCE's total gross exposures amounted to more than €1,484 billion on December 31, 2022, up by €53 billion.

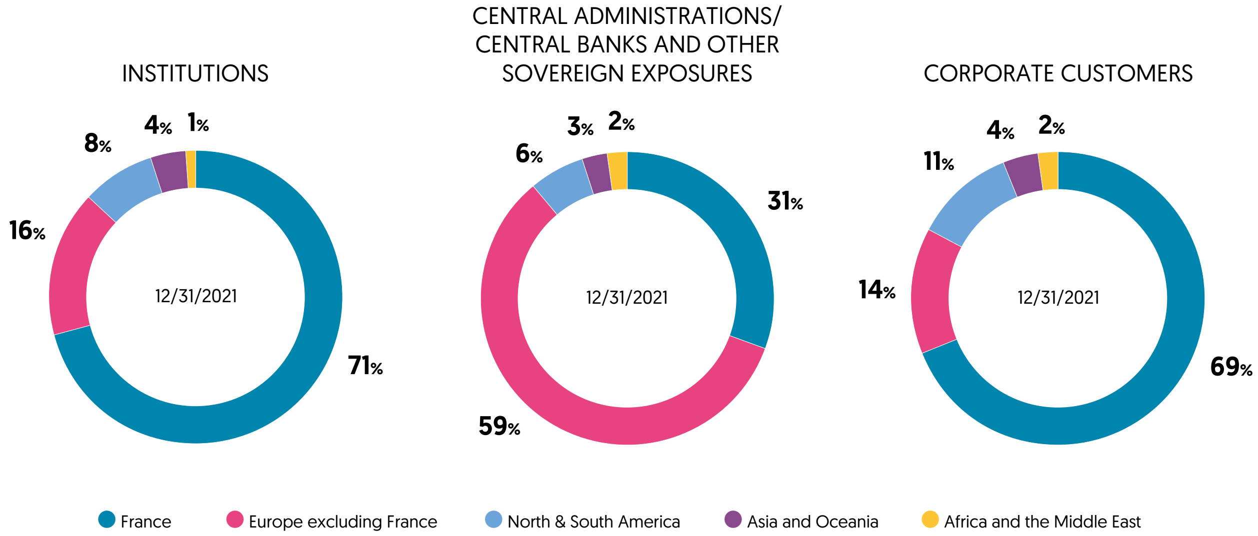
GEOGRAPHIC BREAKDOWN OF GROSS EXPOSURES

12/31/2022



The gross exposures are very predominantly located in Europe, especially in France, for all asset classes (70% of corporates).

12/31/2021



CONCENTRATION

BPCE14 – CONCENTRATION BY BORROWER

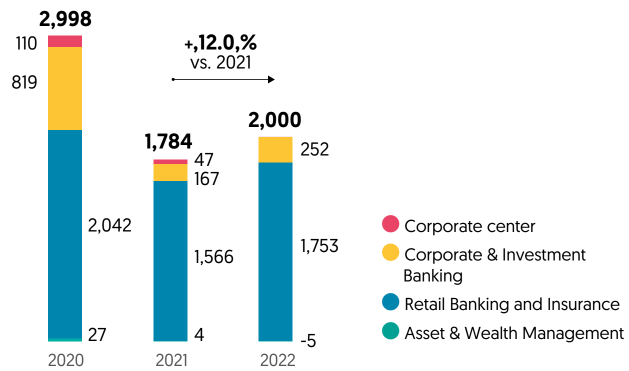
Concentration by borrower	12/31/2022 Distribution Gross amounts/Total major risks[1]	12/31/2022 Weighting in relation to equity Gross amounts/Capital[2]	12/31/2021 Distribution Gross amounts/Total major risks[1]	12/31/2021 Weighting in relation to equity Gross amounts/Capital[2]
No. 1 borrower	6.9%	22.0%	3.9%	10.7%
Top 10 borrowers	22.7%	72.1%	17.6%	48.1%
Top 50 borrowers	51.5%	163.7%	47.6%	130.1%
Top 100 borrowers	70.6%	224.4%	68.5%	187.0%

(1) Total large exposures excluding sovereigns for Groupe BPCE (€221.4 billion at 12/31/2022).
(2) Groupe BPCE regulatory capital (Corep CA4 at 12/31/2022): €69.7 billion.

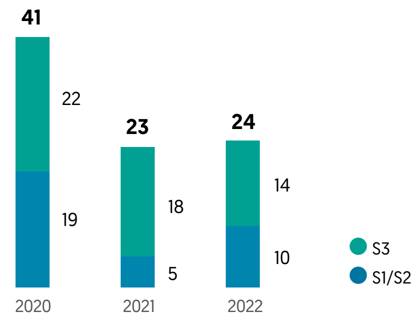
The top borrower is CEGC. The percentage of the Top 100 borrowers was slightly up over the fiscal year and did not show any particular concentration.

Provisions and impairments

CHANGE IN THE GROUP'S NET COST OF RISK (IN €M)



COST OF RISK IN BP (GROUPE BPCE)[1]



The cost of risk for Groupe BPCE increased by 12% in 2022 to €2,000 million. The provisioning policy remains cautious, with the cost of risk of performing loans classified as Stage 1 or Stage 2 up by €433 million while the cost of risk for outstandings for which the risk is proven, classified as Stage 3, down by €216 million.

In 2022, Groupe BPCE's cost of risk amounted to 24 bps in relation to gross customer outstandings (23 bps in 2021), of which 10 bps for provisioning on performing loans (5 bps in 2021) classified as Stage 1 or Stage 2 and 14 bps for the provisioning of loans with proven risk (18 bps in 2021) classified as Stage 3.

The cost of risk amounted to 26 bps for the Retail Banking and Insurance business unit in 2022 (24 bps in 2021), of which 11 bps for the provisioning of performing loans (7 bps in 2021) classified as Stage 1 or Stage 2 and 15 bps for the provisioning of loans with proven risk (18 bps in 2021) classified as Stage 3.

The cost of risk amounted to 36 bps for Corporate & Investment Banking in 2022 (27 bps in 2021), of which 15 bps for the provisioning of performing loans (2 bps in 2021) classified as Stage 1 or Stage 2 and 21 bps for the provisioning of loans with proven risk (24 bps in 2021) classified as Stage 3.

The ratio of non-performing loans to gross loan outstandings stood at 2.3% on December 31, 2022, down by 0.1% compared to the end of 2021.

BPCE15 – HEDGING OF NON-PERFORMING LOANS

In millions of euros	12/31/2022	12/31/2021
Gross outstanding loans to customers and credit institutions	938.3	889.6
O/w S1/S2 outstandings	916.8	867.9
O/w S3 outstandings	21.5	21.6
Non-performing loans/gross outstanding loans	**2.3%**	**2.4%**
S1/S2 impairments recognized	5.5	4.6
S3 impairments recognized	8.9	9.2
Impairments recognized/non-performing loans	**41.3%**	**42.7%**
Coverage ratio (including guarantees related to impaired outstandings)	**68.9%**	**69.8%**

(1) Excluding exceptional items.

Non-performing and forborne exposures

EU CQ1 – CREDIT QUALITY OF FORBORNE EXPOSURES

		12/31/2022							
		a	b	c	d	e	f	g	h
		Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
			Non-performing forborne						
in millions of euros		Performing forborne		Of which defaulted	Of which impaired	On performing forborne exposures	On non-performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
010	**Loans and advances**	**4,111**	**7,166**	**7,166**	**7,160**	**(182)**	**(2,019)**	**6,509**	**3,898**
020	Central banks		4	4	4		(4)		
030	General governments	9	15	15	15		(11)	1	1
050	Other financial corporations	18	69	69	69	(1)	(46)	10	8
060	Non-financial corporations	2,469	3,708	3,708	3,702	(127)	(1,221)	3,038	1,674
070	Households	1,616	3,370	3,370	3,370	(54)	(736)	3,460	2,216
080	**Debt securities**		**18**	**18**	**18**		**(4)**		
090	**Loan commitments given**	**319**	**48**	**48**	**48**	**(16)**	**(1)**	**122**	**22**
100	**TOTAL**	**4,431**	**7,232**	**7,232**	**7,226**	**(198)**	**(2,024)**	**6,631**	**3,920**

		12/31/2021							
		a	b	c	d	e	f	g	h
		Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
			Non-performing forborne						
in millions of euros		Performing forborne		Of which defaulted	Of which impaired	On performing forborne exposures	On non-performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
010	**Loans and advances**	**7,720**	**8,475**	**8,475**	**8,469**	**(248)**	**(2,164)**	**10,730**	**4,865**
020	Central banks		4	4	4		(4)		
030	General governments	7	18	18	17		(7)	3	2
050	Other financial corporations	6	96	96	96		(56)	32	31
060	Non-financial corporations	5,568	4,519	4,519	4,514	(159)	(1,215)	6,379	2,200
070	Households	2,139	3,838	3,838	3,838	(88)	(882)	4,316	2,632
080	**Debt securities**		**18**	**18**	**18**				
090	**Loan commitments given**	**156**	**245**	**245**	**245**	**(2)**	**(42)**	**124**	**17**
100	**TOTAL**	**7,877**	**8,738**	**8,738**	**8,732**	**(250)**	**(2,206)**	**10,854**	**4,883**

EU CR1 – PERFORMING AND NON-PERFORMING EXPOSURES AND RELATED PROVISIONS

		12/31/2022													
		a	b	c	d	e	f	g	h	i	j	k	l	n	o
		Gross carrying amount/Nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Collateral and financial guarantees received	
		Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative fair value adjustments due to credit risk and provisions			On performing exposures	On non-performing exposures
in millions of euros			Of which Stage 1	Of which Stage 2[(1)]		Of which Stage 2	Of which Stage 3[(1)]		Of which Stage 1	Of which Stage 2		Of which Stage 2	Of which Stage 3		
005	**Cash balances at central banks and other demand deposits**	**175,569**	**175,284**	**266**				**(4)**	**(1)**	**(2)**				**244**	
010	**Loans and advances**	**912,198**	**782,523**	**126,816**	**21,505**		**20,379**	**(5,476)**	**(1,331)**	**(4,139)**	**(8,881)**		**(8,605)**	**540,596**	**9,414**
020	Central banks	1,956	1,947	9	19		15				(19)		(15)		
030	General governments	140,182	132,787	6,277	141		139	(34)	(5)	(30)	(58)		(58)	2,367	41
040	Banks	3,883	3,600	284	17		12	(54)	(10)	(44)	(11)		(6)	741	
050	Other financial corporations	18,984	17,295	1,604	130		112	(27)	(17)	(10)	(76)		(59)	4,893	27
060	Non-financial corporations	312,886	252,775	58,461	13,562		12,501	(3,571)	(929)	(2,636)	(5,994)		(5,758)	164,237	5,165
070	*Of which SMEs*	*149,645*	*118,906*	*30,616*	*6,922*		*6,608*	*(2,121)*	*(451)*	*(1,669)*	*(2,981)*		*(2,948)*	*99,311*	*3,492*
080	Households	434,307	374,119	60,181	7,636		7,600	(1,789)	(370)	(1,419)	(2,723)		(2,710)	368,359	4,180
090	**Debt securities**	**74,689**	**67,699**	**469**	**241**		**183**	**(21)**	**(14)**	**(7)**	**(164)**		**(148)**	**1,151**	
100	Central banks	133	133												
110	General governments	47,448	46,174	165				(4)	(2)	(2)				768	
120	Banks	7,560	7,386	4				(1)	(1)					57	
130	Other financial corporations	11,450	6,718	243	95		95	(7)	(4)	(3)	(87)		(87)	34	
140	Non-financial corporations	8,096	7,287	57	147		88	(9)	(8)	(1)	(77)		(61)	293	
150	**Off-balance sheet exposures**	**230,004**	**203,148**	**17,997**	**1,484**		**1,441**	**(508)**	**(223)**	**(268)**	**(267)**		**(263)**	**66,047**	**325**
160	Central banks	581	114											68	
170	General governments	10,564	8,027	584				(1)						531	
180	Banks	7,480	4,899	686	8		8	(13)	(9)	(4)				184	
190	Other financial corporations	29,102	27,805	1,046	3		3	(8)	(6)	(2)	(1)		(1)	14,560	
200	Non-financial corporations	137,820	119,614	13,931	1,425		1,382	(429)	(179)	(233)	(260)		(256)	35,916	309
210	Households	44,457	42,689	1,749	49		49	(58)	(29)	(29)	(6)		(6)	14,788	16
220	**TOTAL**	**1,392,460**	**1,228,654**	**145,547**	**23,231**		**22,002**	**(6,005)**	**(1,568)**	**(4,414)**	**(9,312)**		**(9,016)**	**608,038**	**9,739**

(1) Excluding Purchased or Originated Credit-Impaired (S3 POCI) assets.

		12/31/2021													
		a	b	c	d	e	f	g	h	i	j	k	l	n	o
		Gross carrying amount/Nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Collateral and financial guarantees received	
		Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative fair value adjustments due to credit risk and provisions			On performing exposures	On non-performing exposures
in millions of euros			Of which Stage 1	Of which Stage 2(1)		Of which Stage 2	Of which Stage 3(1)		Of which Stage 1	Of which Stage 2		Of which Stage 2	Of which Stage 3		
005	**Cash balances at central banks and other demand deposits**	**190,962**	**190,826**	**117**										**39**	
010	**Loans and advances**	**863,552**	**781,730**	**78,742**	**21,669**		**20,552**	**(4,651)**	**(1,431)**	**(3,218)**	**(9,236)**		**(9,053)**	**513,861**	**10,221**
020	Central banks	11		11	19		19				(19)		(19)		
030	General governments	132,409	126,289	4,629	133		116	(32)	(5)	(27)	(53)		(53)	2,512	27
040	Banks	6,846	6,670	176	10		6	(21)	(14)	(7)	(10)		(6)	62	
050	Other financial corporations	19,532	17,765	1,606	169		151	(29)	(16)	(13)	(94)		(76)	5,396	34
060	Non-financial corporations	294,498	240,032	53,043	13,104		12,035	(3,259)	(997)	(2,260)	(6,055)		(5,895)	156,223	5,211
070	*Of which SMEs*	*141,247*	*115,086*	*26,056*	*6,249*		*5,914*	*(1,968)*	*(529)*	*(1,438)*	*(2,780)*		*(2,749)*	*91,997*	*3,134*
080	Households	410,255	390,975	19,276	8,234		8,225	(1,310)	(399)	(911)	(3,005)		(3,004)	349,667	4,949
090	**Debt securities**	**76,286**	**68,860**	**657**	**252**		**123**	**(25)**	**(15)**	**(9)**	**(180)**		**(101)**	**1,417**	
100	Central banks	687	687												
110	General governments	48,267	46,861	215				(7)	(5)	(3)				485	
120	Banks	7,030	6,878											67	
130	Other financial corporations	10,594	6,199	344	95		89	(8)	(4)	(5)	(86)		(79)	234	
140	Non-financial corporations	9,707	8,234	98	157		34	(9)	(6)	(2)	(95)		(22)	630	
150	**Off-balance sheet exposures**	**214,044**	**188,808**	**16,073**	**1,829**		**1,539**	**(515)**	**(236)**	**(279)**	**(346)**		**(336)**	**58,031**	**347**
160	Central banks	79	79												
170	General governments	9,726	8,665	466	1		1	(1)						785	
180	Banks	7,856	4,884	129	19		19	(11)	(10)	(1)				136	
190	Other financial corporations	24,602	21,563	1,709	2		2	(73)	(5)	(68)	(1)		(1)	11,827	
200	Non-financial corporations	125,848	108,362	13,111	1,738		1,449	(381)	(190)	(191)	(333)		(324)	29,414	327
210	Households	45,932	45,255	657	68		68	(50)	(31)	(19)	(11)		(11)	15,869	20
220	**TOTAL**	**1,344,844**	**1,230,224**	**95,588**	**23,750**		**22,214**	**(5,190)**	**(1,682)**	**(3,506)**	**(9,762)**		**(9,491)**	**573,348**	**10,569**

(1) Excluding assets impaired on origination or acquisition.

5

Assets with past due payments

Assets with past due payments are performing exposures on which a payment incident has been recorded.

For example:

- a debt instrument is considered past due if the bond issuer is no longer making interest payments;
- a loan is considered past due if one of the installments remains unpaid;
- a current account overdraft carried in "Loans and advances" is considered past due if the overdraft period or authorized limit has been exceeded at the reporting date.

The amounts disclosed in the statement below do not include past due payments resulting from the time difference between the settlement date and the recognition date.

Past due loans and advances (past due principal and accrued interest in the case of loans and total overdrafts in the case of current accounts) can be broken down by due date as follows:

EU CQ3 – CREDIT QUALITY OF PERFORMING AND NON-PERFORMING EXPOSURES BY NUMBER OF DAYS PAST DUE

		12/31/2022											
		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount / Nominal amount											
		Performing exposures			Non-performing exposures								
in millions of euros			Not past due or past due≤30 days	Past due > 30 days≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due> 90 days≤ 180 days	Past due> 180 days≤ 1 year	Past due> 1 year≤ 2 years	Past due> 2 year≤ 5 years	Past due> 5 years≤ 7 years	Past due> 7 years	Of which defaulted
005	**Cash balances at central banks and other demand deposits**	**175,569**	**174,191**	**1,377**									
010	**Loans and advances**	**912,198**	**909,139**	**3,060**	**21,505**	**17,830**	**860**	**1,005**	**614**	**726**	**144**	**327**	**21,499**
020	Central banks	1,956	1,956		19	1			0	4		13	19
030	General governments	140,182	140,080	102	141	94	6	3	0	9		28	141
040	Banks	3,883	3,882	1	17	12				5			17
050	Other financial corporations	18,984	18,935	49	130	100			0	1		29	130
060	Non-financial corporations	312,886	311,346	1,540	13,562	11,442	437	689	340	385	80	190	13,556
070	Of which SMEs	149,645	148,897	748	6,922	5,894	328	232	204	106	40	117	6,922
080	Households	434,307	432,939	1,368	7,636	6,181	417	313	274	322	63	66	7,636
090	**Debt securities**	**74,689**	**74,689**		**241**	**183**				**59**			**241**
100	Central banks	133	133										
110	General governments	47,448	47,448										
120	Banks	7,560	7,560										
130	Other financial corporations	11,450	11,450		95	36				59			95
140	Non-financial corporations	8,096	8,096		147	147							146
150	**Off-balance sheet exposures**	**230,004**			**1,484**								**1,483**
160	Central banks	581											
170	General governments	10,564			0								0
180	Banks	7,480			8								8
190	Other financial corporations	29,102			3								3
200	Non-financial corporations	137,820			1,425								1,424
210	Households	44,457			49								49
220	**TOTAL**	**1,392,460**	**1,158,019**	**4,437**	**23,231**	**18,013**	**860**	**1,005**	**614**	**785**	**144**	**327**	**23,224**

		12/31/2021											
		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount / Nominal amount											
		Performing exposures			Non-performing exposures								
	in millions of euros		Not past due or past due≤30 days	Past due > 30 days≤ 90 days		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due> 90 days≤ 180 days	Past due> 180 days≤ 1 year	Past due> 1 year≤ 2 years	Past due> 2 years≤ 5 years	Past due> 5 years≤ 7 years	Past due> 7 years	Of which defaulted
005	**Cash balances at central banks and other demand deposits**	**190,962**	**190,962**										
010	**Loans and advances**	**863,552**	**861,811**	**1,740**	**21,669**	**17,256**	**1,053**	**1,079**	**859**	**885**	**191**	**346**	**21,625**
020	Central banks	11	11		19	1			0	4		13	19
030	General governments	132,409	132,323	85	133	74	6	3	2	20		27	133
040	Banks	6,846	6,845	1	10	5				5			10
050	Other financial corporations	19,532	19,530	2	169	105	2		27	5		30	151
060	Non-financial corporations	294,498	293,504	994	13,104	10,767	564	657	423	406	95	191	13,082
070	Of which SMEs	141,247	140,836	411	6,249	5,397	222	195	163	126	38	109	6,235
080	Households	410,255	409,598	657	8,234	6,304	481	418	406	445	96	84	8,231
090	**Debt securities**	**76,286**	**76,286**		**252**	**193**				**59**			**247**
100	Central banks	687	687										
110	General governments	48,267	48,267										
120	Banks	7,030	7,030										
130	Other financial corporations	10,594	10,594		95	38				59			95
140	Non-financial corporations	9,707	9,707		157	157							152
150	**Off-balance sheet exposures**	**214,044**			**1,829**								**1,823**
160	Central banks	79											
170	General governments	9,726			1								1
180	Banks	7,856			19								19
190	Other financial corporations	24,602			2								2
200	Non-financial corporations	125,848			1,738								1,732
210	Households	45,932			68								68
220	**TOTAL**	**1,344,845**	**1,129,059**	**1,740**	**23,750**	**17,450**	**1,053**	**1,079**	**859**	**944**	**191**	**346**	**23,695**

Credit quality

EU CQ4 – QUALITY OF NON-PERFORMING EXPOSURES BY GEOGRAPHY

		12/31/2022						
		a	b	c	d	e	f	g
		Gross carrying/nominal amount						
			Of which non-performing					
in millions of euros				Of which defaulted	Of which subject to impairment	Accumulated impairment	Provisions for off-balance sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
010	**On-balance sheet exposures**	**1,008,633**	**21,746**	**21,740**	**999,684**	**(14,540)**		**(2)**
020	France	887,830	19,306	19,306	882,088	(12,933)		
030	United States	27,659	188	188	26,837	(100)		
040	Luxembourg	10,639	160	160	9,989	(188)		
050	Italy	8,831	85	85	8,732	(92)		
060	Spain	6,294	73	71	6,287	(82)		(2)
070	Other countries	67,380	1,935	1,931	65,749	(1,146)		
080	**Off-balance sheet exposures**	**231,488**	**1,484**	**1,483**			**(775)**	
090	France	158,016	1,055	1,055			(684)	
100	United States	28,859	212	212			(24)	
110	Spain	4,218	0	0			(2)	
120	Switzerland	4,389					(1)	
130	United Kingdom	3,585	11	11			(3)	
140	Other countries	32,421	205	205			(61)	
150	**TOTAL**	**1,240,122**	**23,231**	**23,223**	**999,684**	**(14,540)**	**(775)**	**(2)**

		12/31/2021						
		a	b	c	d	e	f	g
		Gross carrying/nominal amount						
			Of which non-performing					
in millions of euros				Of which defaulted	Of which subject to impairment	Accumulated 12 impairment	Provisions for off-balance sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
010	**On-balance sheet exposures**	**961,759**	**21,922**	**21,872**	**952,098**	**(14,090)**		**(1)**
020	France	840,586	18,708	18,682	834,377	(12,498)		
030	United States	27,178	310	310	26,069	(101)		
040	Italy	9,931	118	108	9,870	(92)		
050	Luxembourg	9,117	551	551	8,546	(148)		
060	Spain	6,183	93	90	6,145	(94)		(1)
070	Other countries	68,764	2,142	2,130	67,092	(1,157)		-
080	**Off-balance sheet exposures**	**215,873**	**1,829**	**1,823**			**(861)**	
090	France	149,525	1,433	1,427			(767)	
100	United States	25,032	258	258			(25)	
110	Luxembourg	3,130	1	1			(10)	
120	Spain	3,731	-	-			(3)	
130	Switzerland	3,642	1	1			(1)	
140	Other countries	30,812	136	136			(54)	
150	**TOTAL**	**1,177,632**	**23,750**	**23,695**	**952,098**	**(14,090)**	**(861)**	**(1)**

EU CQ5 – CREDIT QUALITY OF LOANS AND ADVANCES GRANTED TO NON-FINANCIAL CORPORATIONS BY INDUSTRY

		12/31/2022					
		a	b	c	d	e	f
		Gross carrying amount					Accumulated negative changes in fair value due to credit risk on non-performing exposures
			Of which non-performing				
in millions of euros				Of which defaulted	Of which loans and advances subject to impairment	Accumulated impairment	
010	Agriculture, forestry and fishing	5,089	324	324	5,089	(316)	
020	Mining and quarrying	4,020	309	309	4,020	(124)	
030	Manufacturing	23,697	1,606	1,606	23,697	(896)	
040	Electricity, gas, steam and air conditioning supply	10,974	226	226	10,681	(132)	
050	Water supply	1,609	45	45	1,609	(35)	
060	Construction	18,350	1,329	1,329	18,345	(841)	
070	Wholesale and retail trade	35,252	2,116	2,114	34,985	(1,380)	
080	Transport and storage	8,645	456	456	8,643	(279)	
090	Accommodation and food service activities	11,299	934	934	11,299	(786)	
100	Information and communication	5,849	176	176	5,849	(110)	
110	Financial and insurance activities	32,205	941	941	31,986	(868)	
120	Real estate activities	121,112	2,357	2,357	120,876	(2,204)	
130	Professional, scientific and technical activities	18,005	728	728	18,005	(473)	
140	Administrative and support service activities	11,720	438	438	11,712	(256)	
150	Public administration and defense, compulsory social security	215	1	1	215	(1)	
160	Education	1,816	68	68	1,814	(41)	
170	Human health services and social work activities	9,176	1,103	1,103	9,106	(227)	
180	Arts, entertainment and recreation	2,845	130	130	2,844	(98)	
190	Other services	4,571	273	273	4,448	(498)	
200	**TOTAL**	**326,448**	**13,562**	**13,556**	**325,225**	**(9,565)**	

		12/31/2021					
		a	b	c	d	e	f
		Gross carrying amount					Accumulated negative changes in fair value due to credit risk on non-performing exposures
			Of which non-performing				
in millions of euros				Of which defaulted	Of which loans and advances subject to impairment	Accumulated impairment	
010	Agriculture, forestry and fishing	4,667	316	316	4,667	(288)	
020	Mining and quarrying	5,223	402	402	5,223	(189)	
030	Manufacturing	20,981	1,556	1,554	20,981	(888)	
040	Electricity, gas, steam and air conditioning supply	8,757	124	122	8,444	(115)	
050	Water supply	1,379	48	48	1,379	(35)	
060	Construction	17,085	1,132	1,129	17,079	(710)	
070	Wholesale and retail trade	32,831	1,895	1,892	32,403	(1,325)	
080	Transport and storage	7,679	601	600	7,676	(222)	
090	Accommodation and food service activities	10,601	856	856	10,601	(771)	
100	Information and communication	4,930	141	141	4,930	(103)	
110	Financial and insurance activities	34,282	1,042	1,042	34,252	(870)	
120	Real estate activities	111,061	2,569	2,560	110,793	(2,132)	
130	Professional, scientific and technical activities	18,953	1,407	1,405	18,953	(592)	
140	Administrative and support service activities	10,610	475	475	10,601	(198)	
150	Public administration and defense, compulsory social security	288			288	(2)	
160	Education	1,811	57	57	1,809	(43)	
170	Human health services and social work activities	8,312	107	106	8,237	(77)	
180	Arts, entertainment and recreation	2,694	132	131	2,694	(106)	
190	Other services	5,458	244	244	5,369	(648)	
200	**TOTAL**	**307,603**	**13,104**	**13,082**	**306,380**	**(9,314)**	

Risk mitigation techniques

EU CR3 – USE OF CREDIT RISK MITIGATION TECHNIQUES

		12/31/2022				
		Unsecured carrying amount	Secured carrying amount	Of which secured by collateral	Of which secured by financial guarantees	Of which guaranteed by credit derivatives
in millions of euros		a	b	c	d	e
1	Loans and advances	544,901	550,010	169,270	380,740	-
2	Debt securities	73,595	1,151		1,151	
3	**TOTAL**	**618,495**	**551,161**	**169,270**	**381,891**	**-**
4	*Of which non-performing exposures*	*3,287*	*9,414*	*3,482*	*5,932*	-
EU-5	*Of which defaulted*	*3,574*	*9,414*			

		12/31/2021				
		Unsecured carrying amount	Secured carrying amount	Of which secured by collateral	Of which secured by financial guarantees	Of which guaranteed by credit derivatives
in millions of euros		a	b	c	d	e
1	Loans and advances	552,101	524,082	166,368	357,714	-
2	Debt securities	75,121	1,417	192	1,225	
3	**TOTAL**	**627,222**	**525,499**	**166,560**	**358,939**	**-**
4	*Of which non-performing exposures*	*11,700*	*10,221*	*4,713*	*5,509*	-
EU-5	*Of which defaulted*	*11,651*	*10,221*			

5.5 Detailed quantitative disclosures

The detailed quantitative disclosure relating to credit risk in the following tables enhance the information in the previous section under Pillar III.

The key variables presented in the tables are:

- the exposure: all assets (*e.g.* loans, advances, accrued income, etc.) related to transactions on the market or with a customer and recorded on the bank's balance sheet and off-balance sheet;
- the Value at Risk (Exposure at Default, EAD);
- the probability of default (PD);
- the loss given default (LGD);
- the expected loss (EL): the value of the loss likely to be incurred given the quality of the structure of the transaction and any measures taken to mitigate risk, such as collateral. In the IRBA method, the following equation summarizes the relationship between these variables: EL = EAD x PD x LGD (except for loans in default);
- the risk-weighted assets (RWA): calculated on the basis of exposures and the level of risk associated with them, which depends on the credit quality of the counterparties.

The reporting lines show exposures by standard or IRB approach, by geographic area, by sector of activity and by maturity. They also present credit quality by standardized approach or IRB, by geographic area and by business segment.

The tables are presented with respect to credit risk after application of risk mitigation techniques and including CVA. The breakdowns are presented without substitution by the guarantor segment.

Credit risk exposure after mitigation effects and the effects of credit derivatives on risk-weighted assets are also presented.

Credit risk exposures are presented by obligor category listed below:

- central banks and other sovereign exposures: centralization of regulated savings with Caisse des Dépôts et Consignations, deferred taxes and reserves;
- central governments: receivables from sovereign states, central governments and similar, multilateral development banks and international organizations;
- public sector and similar: receivables from national public institutions, local authorities or other public sector entities, including private social housing;
- financial institutions: receivables from regulated credit institutions and similar, including clearing houses;
- companies: other receivables, in particular large corporates, SMEs, medium-sized companies, insurance companies, funds, etc.;
- retail customers: receivables from individual customers, very small businesses, professional customers and self-employed customers;
- exposure to retail customers is further broken down into several categories: exposures guaranteed by a real estate mortgage excluding SMEs, exposures guaranteed by a real estate mortgage including SMEs, revolving exposures, other exposures to retail customers, of which SMEs and other non-SME retail exposures;
- securitization: receivables relating to securitization transactions;
- equities: exposures representing equity securities;
- other assets: this class includes all assets other than those whose risk relates to third parties (fixed assets, goodwill, residual values on finance leases, etc.).

EU CR1 A – MATURITY OF EXPOSURES

		12/31/2022					
		a	b	c	d	e	f
		Net exposure value					
in millions of euros		Demand	<= 1 year	> 1 year and <= 5 years	> 5 years	No stated maturity	Total
1	Loans and advances	18,435	206,063	226,764	377,017	92,448	920,727
2	Debt securities	-	26,717	17,676	13,751	55,512	113,656
3	**TOTAL**	**18,435**	**232,780**	**244,440**	**390,768**	**147,960**	**1,034,383**

		12/31/2021					
		a	b	c	d	e	f
		Net exposure value					
in millions of euros		Demand	<= 1 year	> 1 year and <= 5 years	> 5 years	No stated maturity	Total
1	Loans and advances	18,160	171,928	238,835	363,660	70,847	863,430
2	Debt securities	-	7,279	25,808	20,829	78,554	132,471
3	**TOTAL**	**18,160**	**179,207**	**264,644**	**384,489**	**149,401**	**995,901**

EU CQ7 – COLLATERAL OBTAINED BY TAKING POSSESSION AND EXECUTION PROCESSES

		12/31/2022	
		a	b
		Collateral obtained by taking possession	
in millions of euros		Value at initial recognition	Accumulated negative changes
010	Property, plant and equipment (PP&E)	1	
020	Other than PP&E	169	(11)
030	Residential real estate	13	(4)
040	Commercial real estate	1	
060	Equities and debt securities	153	(6)
070	Other collateral	1	
080	**TOTAL**	**170**	**(11)**

		12/31/2021	
		a	b
		Collateral obtained by taking possession	
in millions of euros		Value at initial recognition	Accumulated negative changes
010	Property, plant and equipment (PP&E)	2	(1)
020	Other than PP&E	28	(6)
030	Residential real estate	17	(5)
040	Commercial real estate	1	
070	Other collateral	10	(1)
080	**TOTAL**	**30**	**(6)**

Loans and advances subject to legislative and non-legislative moratoriums

COVID1 – INFORMATION ON LOANS AND ADVANCES SUBJECT TO LEGISLATIVE AND NON-LEGISLATIVE MORATORIUMS

The COVID1 table is deleted as there are no longer any EBA moratoriums as of December 31, 2021.

COVID2 – BREAKDOWN OF LOANS AND ADVANCES SUBJECT TO LEGISLATIVE AND NON-LEGISLATIVE MORATORIUMS BY RESIDUAL MATURITY OF THE MORATORIUM

	12/31/2022							
		Gross amount						
				Residual maturity of moratorium				
in millions of euros	Number of debtors		O/w: Term expired	<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances for which a moratorium has been offered	**464,519**	**21,755**	**///**	**///**	**///**	**///**	**///**	**///**
Loans and advances subject to moratoriums (granted)	**464,519**	**21,755**	**21,755**	**0**	**0**	**0**	**0**	**0**
o/w: Households	///	1,965	1,965	0	0	0	0	0
o/w: Guaranteed by residential real estate assets	*///*	*1,130*	*1,130*	*0*	*0*	*0*	*0*	*0*
o/w: Non-financial corporations	///	19,790	19,790	0	0	0	0	0
o/w: SMEs	*///*	*11,481*	*11,481*	*0*	*0*	*0*	*0*	*0*
o/w: Guaranteed by commercial real estate assets	*///*	*5,580*	*5,580*	*0*	*0*	*0*	*0*	*0*

	12/31/2021							
		Gross amount						
				Residual maturity of moratorium				
in millions of euros	Number of debtors		O/w: Term expired	<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
Loans and advances for which a moratorium has been offered	**464,607**	**25,320**	**///**	**///**	**///**	**///**	**///**	**///**
Loans and advances subject to moratoriums (granted)	**464,607**	**25,320**	**25,320**	**0**	**0**	**0**	**0**	**0**
o/w: Households	///	2,354	2,354	0	0	0	0	0
o/w: Guaranteed by residential real estate assets	*///*	*1,249*	*1,249*	*0*	*0*	*0*	*0*	*0*
o/w: Non-financial corporations	///	22,966	22,966	0	0	0	0	0
o/w: SMEs	*///*	*14,300*	*14,300*	*0*	*0*	*0*	*0*	*0*
o/w: Guaranteed by commercial real estate assets	*///*	*5,779*	*5,779*	*0*	*0*	*0*	*0*	*0*

COVID3 – INFORMATION ON NEW LOANS AND ADVANCES PROVIDED UNDER PUBLIC GUARANTEE SCHEMES IN RESPONSE TO THE COVID-19 CRISIS

	12/31/2022			
	Gross amount		Maximum amount of the guarantee that can be considered	Gross amount
in millions of euros		o/w: subject to restructuring	Collateral received(1)	Capital inflows on non-performing exposures
New loans and advances provided under public guarantee schemes	**24,071**	**210**		
o/w: Households	618	///	///	
o/w: Guaranteed by residential real estate assets	1	///	///	
o/w: Non-financial corporations	23,453	210		
o/w: SMEs	7,329	///	///	
o/w: Guaranteed by commercial real estate assets	82	///	///	

(1) State-guaranteed loans in France with a guarantee of between 70% and 90%.

	12/31/2021			
	Gross amount		Maximum amount of the guarantee that can be considered	Gross amount
in millions of euros		o/w: subject to restructuring	Collateral received*	Capital inflows on non-performing exposures
New loans and advances provided under public guarantee schemes	**27,921**	**360**	**0**	
o/w: Households	788	///	///	
o/w: Guaranteed by residential real estate assets	2	///	///	
o/w: Non-financial corporations	27,133	360	0	
o/w: SMEs	8,633	///	///	
o/w: Guaranteed by commercial real estate assets	21	///	///	

* State-guaranteed loans in France with a guarantee of between 70% and 90%.

Standardized approach

EU CR4 – STANDARDIZED APPROACH – CREDIT RISK EXPOSURE AND MITIGATION EFFECTS

		12/31/2022					
		Exposures before CCF and before CRM		Exposures after CCF and post CRM		RWAs and RWAs density	
		On-balance sheet exposures	Off-balance sheet exposures	On-balance sheet exposures	Off-balance sheet exposures	Risk-Weighted Assets	Density of RWAs *(in %)*
Exposure classes *in millions of euros*		a	b	c	d	e	f
1	Central governments or central banks	96,540	2	109,984	18	7,834	7%
2	Regional governments or local authorities	42,699	4,286	51,772	1,639	10,693	20%
3	Public sector entities	19,792	3,765	17,742	1,704	4,439	23%
4	Multilateral development banks	325	-	516	9	-	0%
5	International organizations	459	-	459	-	-	0%
6	Institutions	4,792	4,520	5,197	4,402	1,293	13%
7	Corporate customers	90,247	35,071	77,276	16,054	76,630	82%
8	Retail	8,515	14,543	7,761	560	6,005	72%
9	Exposures secured by a real estate mortgage	60,650	1,933	53,859	979	21,447	39%
10	Exposures in default	4,369	356	3,277	208	4,204	121%
11	Exposures associated with particularly high risk	8,446	3,418	8,078	1,599	14,515	150%
12	Covered bonds	242	-	242	-	24	10%
13	Institutions and corporates with a short-term credit assessment	902	23	854	4	545	64%
14	Collective investment undertakings	2,045	0	2,045	0	3,429	168%
15	Equities	0	-	0	-	-	100%
16	Other items	7,507	15	7,506	-	7,045	94%
17	**TOTAL**	**347,529**	**67,934**	**346,567**	**27,176**	**158,104**	**42%**

		12/31/2021					
		Exposures before CCF and before CRM		Exposures after CCF and post CRM		RWAs and RWAs density	
Exposure classes *in millions of euros*		On-balance sheet exposures	Off-balance sheet exposures	On-balance sheet exposures	Off-balance sheet exposures	Risk-Weighted Assets	Density of RWAs *(in %)*
		a	b	c	d	e	f
1	Central governments or central banks	90,752	2	105,887	36	6,444	6%
2	Regional governments or local authorities	44,607	4,749	53,384	1,930	11,044	20%
3	Public sector entities	19,304	3,123	17,163	1,345	4,155	22%
4	Multilateral development banks	231	-	349	1	-	0%
5	International organizations	633	-	633	-	-	0%
6	Institutions	6,877	1,707	7,905	1,368	1,315	14%
7	Corporate customers	85,165	31,468	72,151	14,873	70,766	81%
8	Retail	8,995	15,119	8,224	750	6,469	72%
9	Exposures secured by a real estate mortgage	59,484	1,805	51,902	893	21,136	40%
10	Exposures in default	4,271	409	3,150	272	3,944	115%
11	Exposures associated with particularly high risk	7,625	3,047	7,346	1,459	13,207	150%
12	Covered bonds	125	-	125	-	12	10%
13	Institutions and corporates with a short-term credit assessment	730	18	587	3	365	62%
14	Collective investment undertakings	2,182	1	2,182	1	4,216	193%
15	Equities	14	-	14	-	14	100%
16	Other items	7,368	-	7,368	-	6,522	89%
17	**TOTAL**	**338,361**	**61,448**	**338,370**	**22,931**	**149,609**	**41%**

EU CR5 – STANDARDIZED APPROACH – EXPOSURES BY ASSET CLASS AND BY RISK WEIGHTING COEFFICIENT, AFTER APPLICATION OF CREDIT RISK MITIGATION TECHNIQUES

		12/31/2022																
		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total	Of which unrated
in millions of euros		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
1	Central governments or central banks	106,334	-	-	-	231	-	151	-	-	334	-	2,951	-	-	-	110,002	-
2	Regional governments or local authorities	900	-	-	-	51,872	-	638	-	-	-	-	-	-	-	-	53,410	-
3	Public sector entities	11,014	-	-	-	4,085	-	1,633	-	-	2,519	191	-	-	-	3	19,445	-
4	Multilateral development banks	525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	525	-
5	International organizations	459	-	-	-	-	-	-	-	-	-	-	-	-	-	-	459	-
6	Institutions	4,177	1,907	-	-	2,677	-	238	-	-	601	-	-	-	-	-	9,599	-
7	Secured bonds	-	-	-	242	-	-	-	-	-	-	-	-	-	-	-	242	-
8	Corporate customers	59	-	-	-	8,619	385	15,106	252	-	64,685	4,224	-	-	-	-	93,330	-
9	Retail	-	-	-	-	-	-	-	-	8,321	-	-	-	-	-	-	8,321	-
10	Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Units or shares in collective investment undertakings (CIU)	-	-	-	-	-	-	-	-	-	108	-	-	-	1	1,936	2,045	-
12	Other exposures	14	-	-	28	16	-	22	-	-	6,355	-	-	-	-	1,071	7,506	-
13	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	176	-	351	-	-	307	24	-	-	-	-	858	-
14	Exposures secured by a real estate mortgage	-	-	-	-	-	35,119	18,305	-	739	611	-	-	-	-	63	54,838	-
15	High risk exposures	-	-	-	-	-	-	-	-	-	-	9,677	-	-	-	-	9,677	-
16	Exposures in default	-	-	-	-	-	-	-	-	-	2,046	1,438	-	-	-	-	3,485	-
17	**TOTAL**	**123,481**	**1,907**	**-**	**270**	**67,677**	**35,504**	**36,444**	**252**	**9,060**	**77,567**	**15,555**	**2,951**	**-**	**1**	**3,073**	**373,742**	**-**

		12/31/2021																
		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total	Of which unrated
	in millions of euros	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
1	Central governments or central banks	102,517	-	-	-	507	-	179	-	-	351	22	2,348	-	-	-	105,923	-
2	Regional governments or local authorities	1,081	-	-	-	53,585	-	644	-	-	1	3	-	-	-	-	55,314	-
3	Public sector entities	10,140	-	-	-	4,337	-	1,709	-	-	2,086	232	-	-	-	5	18,508	-
4	Multilateral development banks	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	-
5	International organizations	633	-	-	-	-	-	-	-	-	-	-	-	-	-	-	633	-
6	Institutions	3,306	2,341	-	-	2,818	-	211	-	-	596	1	-	-	-	-	9,273	-
7	Secured bonds	-	-	-	125	-	-	-	-	-	-	-	-	-	-	-	125	-
8	Corporate customers	19	-	-	-	7,680	434	15,716	278	-	59,226	3,671	-	-	-	-	87,023	-
9	Retail	-	-	-	-	-	-	-	-	8,975	-	-	-	-	-	-	8,975	-
10	Equity exposures	-	-	-	-	-	-	-	-	-	14	-	-	-	-	-	14	-
11	Units or shares in collective investment undertakings (CIU)	-	-	-	-	-	-	-	-	-	113	-	-	-	1	2,070	2,183	-
12	Other exposures	8	10	-	22	17	-	18	-	-	5,610	-	-	-	-	1,682	7,368	-
13	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	127	-	255	-	-	172	36	-	-	-	-	590	-
14	Exposures secured by a real estate mortgage	-	-	-	-	-	33,172	17,305	-	1,708	539	-	-	-	-	70	52,795	-
15	High risk exposures	-	-	-	-	-	-	-	-	-	-	8,805	-	-	-	-	8,805	-
16	Exposures in default	-	-	-	-	-	-	-	-	-	2,368	1,055	-	-	-	-	3,423	-
17	**TOTAL**	**118,054**	**2,351**	**-**	**146**	**69,071**	**33,606**	**36,037**	**278**	**10,683**	**71,076**	**13,824**	**2,348**	**-**	**1**	**3,826**	**361,301**	**-**

Internal models approach

EU CR6 – IRB APPROACH – CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE

	12/31/2022												
A-IRB *in millions of euros*	PD range	On-balance sheet expo-sures	Off-balance sheet expo-sures before CCF	Weighted average CCF	Expo-sure post CCF and post CRM	Weigh-ted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supple-mentary factors	Density of risk-weighted exposure	Expected loss amount	Value adjust-ments and provi-sions
	a	b	c	d	e	f	g	h	i	j	k	l	m
CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	50,673	1,106	92%	51,953	0.00%	57	9.26%	-	54	0.10%	-	-
	0.00 to < 0.10	50,673	1,106	92%	51,953	0.00%	57	9.26%	-	54	0.10%	-	-
	0.10 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.15 to < 0.25	23	-	0%	249	0.00%	3	7.81%	3	1	0.45%	-	-
	0.25 to < 0.50	42	207	100%	303	0.02%	3	12.86%	5	12	4.00%	-	-
	0.50 to < 0.75	-	-	0%	311	0.00%	-	7.07%	3	-	0.00%	-	-
	0.75 to < 2.50	-	-	0%	1,331	0.01%	-	11.04%	3	30	2.22%	-	-
	0.75 to < 1.75	-	-	0%	490	0.00%	-	13.10%	3	16	3.17%	-	-
	1.75 to < 2.5	-	-	0%	842	0.02%	-	9.84%	3	14	1.67%	-	-
	2.50 to < 10.00	236	108	100%	1,358	0.09%	7	11.37%	4	77	5.68%	1	(1)
	2.5 to < 5	236	108	100%	685	0.17%	7	10.45%	3	55	8.09%	1	(1)
	5 to < 10	-	-	0%	672	0.01%	-	12.31%	4	22	3.22%	-	-
	10.00 to < 100.00	47	-	0%	77	16.32%	7	38.05%	1	150	195.59%	8	(35)
	10 to < 20	-	-	0%	30	0.00%	-	7.10%	1	-	0.00%	-	-
	20 to < 30	47	-	0%	47	26.76%	7	57.86%	1	150	320.78%	8	(35)
	30.00 to < 100.00	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	100.00 (default)	83	-	0%	251	21.88%	8	28.92%	2	1	0.38%	65	(65)
Central governments and central banks sub-total		**51,104**	**1,420**	**94%**	**55,833**	**0.57%**	**85**	**9.48%**	**-**	**325**	**0.58%**	**73**	**(101)**
INSTITUTIONS	0.00 to < 0.15	5,010	1,259	35%	5,431	0.04%	237	36.61%	1	561	10.33%	1	-
	0.00 to < 0.10	5,010	1,259	35%	5,431	0.04%	237	36.61%	1	561	10.33%	1	-
	0.10 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.15 to < 0.25	136	86	20%	170	0.18%	39	15.82%	1	40	23.84%	-	-
	0.25 to < 0.50	276	140	46%	391	0.28%	33	47.11%	-	158	40.26%	1	-
	0.50 to < 0.75	41	309	21%	407	0.17%	22	37.26%	1	143	35.06%	-	-
	0.75 to < 2.50	35	386	24%	656	0.27%	40	42.40%	2	288	43.96%	1	(1)
	0.75 to < 1.75	28	315	24%	478	0.31%	33	45.06%	2	240	50.12%	1	-
	1.75 to < 2.5	7	71	20%	177	0.17%	7	35.23%	2	48	27.32%	-	-
	2.50 to < 10.00	152	1,050	22%	572	2.10%	91	59.55%	1	929	162.33%	10	(5)
	2.5 to < 5	142	996	22%	535	2.02%	76	60.23%	1	853	159.46%	9	(3)
	5 to < 10	10	55	20%	38	3.13%	15	49.85%	1	76	203.25%	1	(2)
	10.00 to < 100.00	-	-	0%	12	0.18%	1	38.98%	2	3	25.17%	-	-
	10 to < 20	-	-	0%	12	0.18%	1	38.98%	2	3	25.17%	-	-
	20 to < 30	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	30.00 to < 100.00	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	100.00 (default)	25	8	48%	68	42.33%	6	67.51%	2	14	21.23%	19	(19)
Institutions sub-total		**5,674**	**3,238**	**30%**	**7,708**	**2.80%**	**469**	**39.19%**	**1**	**2,137**	**27.72%**	**33**	**(26)**

A-IRB *in millions of euros*	PD range	On-balance sheet exposures	Off-balance sheet exposures before CCF	Weighted average CCF	Exposure post CCF and post CRM	Weighted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supplementary factors	Density of risk-weighted exposure	Expected loss amount	Value adjustments and provisions
	12/31/2022												
	a	b	c	d	e	f	g	h	i	j	k	l	m
CORPORATES – SME	0.00 to < 0.15	244	7	62%	151	0.09%	161	21.55%	3	18	12.02%	-	-
	0.00 to < 0.10	187	3	73%	93	0.06%	91	23.72%	3	10	10.56%	-	-
	0.10 to < 0.15	56	4	52%	58	0.15%	70	18.09%	3	8	14.37%	-	-
	0.15 to < 0.25	54	3	20%	55	0.21%	177	20.90%	2	9	15.96%	-	-
	0.25 to < 0.50	82	123	97%	200	0.39%	125	19.16%	4	47	23.67%	-	-
	0.50 to < 0.75	904	176	93%	1,051	0.62%	2,379	24.16%	3	392	37.32%	2	(1)
	0.75 to < 2.50	1,982	230	86%	2,113	1.43%	3,334	24.23%	3	1,058	50.07%	7	(5)
	0.75 to < 1.75	1,897	207	88%	1,996	1.39%	3,293	23.97%	3	974	48.80%	7	(5)
	1.75 to < 2.5	85	23	65%	117	2.11%	41	28.65%	3	84	71.63%	1	(1)
	2.50 to < 10.00	1,801	154	83%	1,858	3.97%	4,559	19.49%	3	1,028	55.32%	14	(15)
	2.5 to < 5	1,599	138	84%	1,661	3.62%	3,721	19.48%	3	895	53.89%	12	(12)
	5 to < 10	202	16	76%	197	6.98%	838	19.56%	3	133	67.39%	3	(2)
	10.00 to < 100.00	358	88	67%	410	15.27%	879	19.73%	3	392	95.61%	13	(8)
	10 to < 20	320	73	62%	358	12.99%	759	20.13%	3	343	96.05%	10	(6)
	20 to < 30	-	-	0%	-	0.00%	23	0.00%	-	-	0.00%	-	-
	30.00 to < 100.00	38	15	91%	52	30.95%	97	17.02%	4	48	92.58%	3	(2)
	100.00 (default)	210	8	63%	203	100.00%	550	18.32%	3	208	102.35%	69	(56)
Corporates – SME sub-total		**5,634**	**789**	**86%**	**6,041**	**7.15%**	**12,164**	**21.99%**	**3**	**3,152**	**52.18%**	**105**	**(85)**
CORPORATES – SPECIALIZED FINANCING	0.00 to < 0.15	1,329	675	86%	1,861	0.06%	59	17.57%	4	211	11.34%	-	(1)
	0.00 to < 0.10	1,329	675	86%	1,861	0.06%	59	17.57%	4	211	11.34%	-	(1)
	0.10 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.15 to < 0.25	779	622	86%	1,293	0.16%	71	12.43%	3	177	13.72%	-	(1)
	0.25 to < 0.50	1,785	1,162	55%	2,176	0.30%	138	15.29%	3	457	20.99%	1	(2)
	0.50 to < 0.75	3,872	3,758	53%	5,300	0.52%	283	17.82%	3	1,569	29.61%	5	(4)
	0.75 to < 2.50	7,193	4,493	47%	7,490	1.22%	372	19.02%	3	3,401	45.40%	17	(40)
	0.75 to < 1.75	5,510	3,680	47%	6,041	1.03%	305	19.04%	3	2,593	42.92%	12	(20)
	1.75 to < 2.5	1,683	812	45%	1,449	2.00%	67	18.97%	3	808	55.73%	5	(20)
	2.50 to < 10.00	1,953	568	46%	1,452	4.31%	140	18.89%	3	939	64.67%	12	(56)
	2.5 to < 5	972	223	51%	752	2.98%	73	19.13%	2	426	56.65%	4	(15)
	5 to < 10	981	345	43%	700	5.72%	67	18.63%	3	513	73.27%	7	(41)
	10.00 to < 100.00	-	-	0%	-	10.31%	2	64.75%	3	1	301.07%	-	-
	10 to < 20	-	-	0%	-	10.31%	2	64.75%	3	1	301.07%	-	-
	20 to < 30	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	30.00 to < 100.00	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	100.00 (default)	380	160	64%	407	100.00%	28	60.60%	3	286	70.19%	109	(107)
Corporates – Specialized financing sub-total		**17,293**	**11,438**	**55%**	**19,980**	**9.45%**	**1,093**	**18.57%**	**3**	**7,041**	**35.24%**	**144**	**(211)**

A-IRB *in millions of euros*	PD range	On-balance sheet exposures	Off-balance sheet exposures before CCF	Weighted average CCF	Exposure post CCF and post CRM	Weighted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supplementary factors	Density of risk-weighted exposure	Expected loss amount	Value adjustments and provisions
	12/31/2022												
	a	b	c	d	e	f	g	h	i	j	k	l	m
CORPORATES – OTHER	0.00 to < 0.15	12,232	23,729	54%	24,993	0.05%	535	36.63%	2	3,880	15.52%	5	(13)
	0.00 to < 0.10	12,199	23,588	54%	24,851	0.05%	496	36.66%	2	3,841	15.46%	5	(13)
	0.10 to < 0.15	33	141	78%	143	0.13%	39	31.96%	3	38	26.87%	-	-
	0.15 to < 0.25	5,911	10,134	59%	11,711	0.13%	329	31.41%	2	2,575	21.99%	5	(7)
	0.25 to < 0.50	6,259	8,316	52%	10,728	0.22%	274	31.67%	3	3,205	29.87%	7	(8)
	0.50 to < 0.75	4,419	9,172	53%	9,256	0.42%	725	32.91%	3	3,845	41.54%	13	(8)
	0.75 to < 2.50	8,991	9,936	47%	13,581	1.07%	1,446	31.81%	2	7,907	58.22%	46	(50)
	0.75 to < 1.75	7,134	6,994	47%	10,811	0.88%	1,319	31.70%	2	5,839	54.01%	29	(30)
	1.75 to < 2.5	1,857	2,943	47%	2,769	1.81%	127	32.23%	2	2,068	74.66%	17	(21)
	2.50 to < 10.00	5,306	4,221	56%	7,245	3.90%	3,217	32.01%	2	7,138	98.52%	92	(165)
	2.5 to < 5	3,550	3,256	52%	5,081	3.11%	2,808	31.65%	2	4,575	90.03%	51	(73)
	5 to < 10	1,756	965	68%	2,164	5.76%	409	32.86%	3	2,563	118.46%	41	(92)
	10.00 to < 100.00	693	197	47%	750	9.85%	638	29.34%	2	641	85.46%	19	(14)
	10 to < 20	559	161	47%	599	7.79%	573	29.99%	2	498	83.14%	13	(9)
	20 to < 30	24	25	43%	35	24.77%	15	30.99%	2	62	175.11%	3	(2)
	30.00 to < 100.00	110	11	51%	115	15.99%	50	25.48%	2	81	70.20%	4	(4)
	100.00 (default)	2,282	267	28%	2,235	94.76%	382	40.08%	2	1,632	73.03%	1,108	(1,099)
Corporates – Other sub-total		**46,093**	**65,973**	**60%**	**80,498**	**17.90%**	**7,546**	**33.58%**	**2**	**30,821**	**38.29%**	**1,295**	**(1,365)**
RETAIL – SME REAL ESTATE	0.00 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.00 to < 0.10	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.10 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.15 to < 0.25	8,879	307	100%	9,237	0.24%	50,458	15.16%	5	577	6.25%	3	(7)
	0.25 to < 0.50	8,024	254	71%	8,203	0.35%	50,532	13.96%	5	623	7.60%	4	(10)
	0.50 to < 0.75	1,809	31	87%	1,836	0.53%	15,477	14.91%	5	188	10.26%	1	(2)
	0.75 to < 2.50	23,445	949	94%	24,337	1.38%	120,174	19.11%	5	6,127	25.18%	65	(122)
	0.75 to < 1.75	18,013	576	96%	18,564	1.14%	93,712	18.74%	5	4,055	21.84%	40	(64)
	1.75 to < 2.5	5,433	374	91%	5,773	2.15%	26,462	20.28%	5	2,073	35.90%	25	(58)
	2.50 to < 10.00	13,604	658	95%	14,232	5.13%	75,300	17.40%	5	7,268	51.07%	128	(366)
	2.5 to < 5	7,711	334	94%	8,025	3.67%	42,959	16.36%	5	3,321	41.38%	47	(129)
	5 to < 10	5,893	324	97%	6,207	7.01%	32,341	18.73%	5	3,947	63.60%	81	(237)
	10.00 to < 100.00	5,214	308	98%	5,517	23.46%	28,744	19.43%	5	5,101	92.45%	252	(534)
	10 to < 20	2,457	148	100%	2,607	14.82%	13,304	18.93%	5	2,256	86.53%	72	(185)
	20 to < 30	1,959	121	95%	2,075	24.02%	10,916	19.93%	5	2,150	103.65%	98	(211)
	30.00 to < 100.00	797	39	100%	836	49.02%	4,524	19.76%	5	695	83.12%	82	(137)
	100.00 (default)	1,346	7	1%	1,347	100.00%	10,418	57.12%	4	584	43.36%	724	(484)
Retail – SME Real estate sub-total		**62,320**	**2,514**	**93%**	**64,710**	**20.06%**	**351,103**	**18.21%**	**5**	**20,469**	**31.63%**	**1,178**	**(1,524)**

	12/31/2022												
	PD range	On-balance sheet expo-sures	Off-balance sheet expo-sures before CCF	Weighted average CCF	Expo-sure post CCF and post CRM	Weigh-ted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supple-mentary factors	Density of risk-weighted exposure	Expected loss amount	Value adjust-ments and provi-sions
A-IRB *in millions of euros*	a	b	c	d	e	f	g	h	i	j	k	l	m
RETAIL – NON-SME REAL ESTATE	0.00 to < 0.15	128,870	4,884	91%	133,302	0.09%	112,055	10.08%	-	3,041	2.28%	12	(6)
	0.00 to < 0.10	64,133	2,617	86%	66,374	0.06%	59,215	9.96%	-	1,066	1.61%	4	(2)
	0.10 to < 0.15	64,737	2,267	97%	66,929	0.12%	52,840	10.20%	-	1,976	2.95%	8	(4)
	0.15 to < 0.25	52,640	1,956	100%	54,699	0.24%	48,327	11.38%	-	3,029	5.54%	15	(15)
	0.25 to < 0.50	27,295	938	79%	28,034	0.25%	30,661	8.97%	-	1,262	4.50%	6	(9)
	0.50 to < 0.75	34,139	1,541	98%	35,651	0.63%	72,575	10.75%	-	3,714	10.42%	24	(29)
	0.75 to < 2.50	24,755	1,973	97%	26,669	1.75%	69,000	10.34%	-	5,136	19.26%	47	(97)
	0.75 to < 1.75	16,821	1,231	96%	17,997	1.43%	47,867	10.75%	-	3,231	17.95%	28	(49)
	1.75 to < 2.5	7,934	742	99%	8,671	2.41%	21,133	9.48%	-	1,905	21.97%	20	(48)
	2.50 to < 10.00	14,892	1,667	90%	16,398	4.02%	52,732	11.52%	-	5,713	34.84%	76	(140)
	2.5 to < 5	11,571	1,274	91%	12,727	3.31%	37,659	11.34%	-	3,942	30.98%	47	(92)
	5 to < 10	3,321	393	89%	3,671	6.49%	15,073	12.13%	-	1,770	48.22%	29	(47)
	10.00 to < 100.00	6,612	230	95%	6,831	20.47%	34,688	11.86%	-	4,393	64.30%	168	(206)
	10 to < 20	3,870	162	94%	4,022	12.16%	18,690	11.49%	-	2,397	59.59%	57	(101)
	20 to < 30	2,094	40	100%	2,134	23.48%	10,730	12.58%	-	1,641	76.88%	63	(49)
	30.00 to < 100.00	648	29	93%	675	60.49%	5,268	11.78%	-	355	52.66%	48	(56)
	100.00 (default)	2,129	13	13%	2,130	100.00%	26,789	42.47%	-	768	36.04%	843	(537)
Retail – SME Real estate sub-total		**291,331**	**13,201**	**93%**	**303,715**	**19.68%**	**446,827**	**10.66%**	**-**	**27,056**	**8.91%**	**1,192**	**(1,038)**
RETAIL — ELIGIBLE REVOLVING EXPOSURES	0.00 to < 0.15	1,312	6,186	52%	4,516	0.07%	24,172	22.30%	-	82	1.82%	1	(1)
	0.00 to < 0.10	704	3,092	57%	2,474	0.05%	10,122	22.71%	-	32	1.29%	-	-
	0.10 to < 0.15	608	3,094	46%	2,042	0.10%	14,050	21.80%	-	50	2.46%	1	(1)
	0.15 to < 0.25	384	906	47%	810	0.24%	11,183	33.47%	-	36	4.39%	1	-
	0.25 to < 0.50	371	1,062	61%	1,015	0.20%	8,810	16.32%	-	22	2.20%	-	-
	0.50 to < 0.75	1,011	1,558	54%	1,849	0.55%	28,126	24.15%	-	126	6.83%	3	(1)
	0.75 to < 2.50	654	842	54%	1,112	1.33%	30,523	18.19%	-	213	19.15%	6	(7)
	0.75 to < 1.75	387	510	51%	645	1.10%	20,113	20.70%	-	110	17.06%	3	(3)
	1.75 to < 2.5	267	332	60%	467	1.65%	10,410	14.71%	-	103	22.04%	3	(4)
	2.50 to < 10.00	764	843	30%	1,020	2.08%	28,757	15.73%	-	535	52.40%	21	(17)
	2.5 to < 5	372	379	43%	534	2.69%	19,780	23.10%	-	190	35.59%	7	(5)
	5 to < 10	392	463	21%	487	1.42%	8,977	7.64%	-	345	70.81%	15	(12)
	10.00 to < 100.00	400	266	43%	515	14.90%	36,010	19.48%	-	426	82.68%	37	(28)
	10 to < 20	214	152	49%	288	9.13%	18,759	20.08%	-	195	67.83%	11	(10)
	20 to < 30	113	75	44%	146	19.43%	11,303	22.38%	-	133	91.14%	11	(4)
	30.00 to < 100.00	73	39	20%	81	27.26%	5,948	12.08%	-	97	120.43%	15	(14)
	100.00 (default)	352	8	1%	352	41.66%	47,510	19.45%	-	65	18.54%	205	(214)
Retail – Eligible revolving exposures sub-total		**5,248**	**11,670**	**55%**	**11,189**	**9.70%**	**215,091**	**21.64%**	**-**	**1,505**	**13.45%**	**274**	**(269)**

A-IRB *in millions of euros*	12/31/2022												
	PD range	On-balance sheet exposures	Off-balance sheet exposures before CCF	Weighted average CCF	Exposure post CCF and post CRM	Weighted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supplementary factors	Density of risk-weighted exposure	Expected loss amount	Value adjustments and provisions
	a	b	c	d	e	f	g	h	i	j	k	l	m
RETAIL – OTHER SMES	0.00 to < 0.15	-	-	100%	-	0.15%	1	45.00%	2	-	12.01%	-	-
	0.00 to < 0.10	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.10 to < 0.15	-	-	100%	-	0.15%	1	45.00%	2	-	12.01%	-	-
	0.15 to < 0.25	1,628	182	80%	1,773	0.23%	127,522	23.55%	4	174	9.80%	1	(2)
	0.25 to < 0.50	7,404	1,109	66%	8,132	0.39%	347,903	15.38%	3	673	8.28%	5	(9)
	0.50 to < 0.75	783	65	69%	828	0.56%	150,087	18.02%	4	96	11.60%	1	(1)
	0.75 to < 2.50	14,158	1,727	75%	15,457	1.48%	703,955	23.23%	4	3,522	22.79%	55	(84)
	0.75 to < 1.75	9,302	1,106	73%	10,106	1.14%	501,834	21.41%	4	1,957	19.36%	25	(34)
	1.75 to < 2.5	4,856	621	80%	5,351	2.13%	202,121	26.67%	4	1,566	29.26%	30	(51)
	2.50 to < 10.00	9,921	1,411	75%	10,978	5.12%	426,017	23.79%	4	3,318	30.22%	132	(221)
	2.5 to < 5	5,149	734	76%	5,704	3.44%	264,615	24.24%	4	1,695	29.71%	48	(73)
	5 to < 10	4,772	677	74%	5,274	6.93%	161,402	23.31%	4	1,623	30.77%	84	(148)
	10.00 to < 100.00	4,806	523	72%	5,178	23.25%	194,192	23.16%	3	2,288	44.19%	274	(382)
	10 to < 20	2,668	323	70%	2,893	15.59%	90,474	23.23%	3	1,153	39.86%	104	(152)
	20 to < 30	1,375	135	76%	1,476	25.25%	69,953	23.78%	3	762	51.62%	87	(109)
	30.00 to < 100.00	763	65	72%	809	46.95%	33,765	21.77%	3	374	46.17%	83	(120)
	100.00 (default)	3,307	184	22%	3,347	100.00%	95,914	57.26%	3	1,464	43.76%	1,804	(1,712)
Retail – Other SMEs sub-total		**42,007**	**5,202**	**72%**	**45,693**	**15.65%**	**2,045,591**	**24.37%**	**4**	**11,536**	**25.25%**	**2,272**	**(2,411)**
RETAIL – OTHER NON-SMES	0.00 to < 0.15	26,692	1,275	76%	27,656	0.09%	69,466	19.18%	-	1,284	4.64%	5	(24)
	0.00 to < 0.10	12,449	684	72%	12,939	0.05%	32,904	17.80%	-	384	2.96%	1	(7)
	0.10 to < 0.15	14,242	591	80%	14,717	0.12%	36,562	20.38%	-	901	6.12%	4	(18)
	0.15 to < 0.25	6,724	202	93%	6,912	0.24%	20,404	28.79%	-	965	13.96%	5	(15)
	0.25 to < 0.50	8,502	407	70%	8,789	0.25%	23,661	15.20%	-	665	7.57%	3	(9)
	0.50 to < 0.75	11,270	490	78%	11,654	0.64%	46,642	22.74%	-	2,298	19.72%	17	(32)
	0.75 to < 2.50	8,908	515	86%	9,349	1.72%	52,478	19.83%	-	2,760	29.52%	37	(46)
	0.75 to < 1.75	5,161	246	85%	5,370	1.34%	30,602	22.73%	-	1,682	31.32%	19	(23)
	1.75 to < 2.5	3,747	269	86%	3,978	2.23%	21,876	15.91%	-	1,078	27.09%	18	(23)
	2.50 to < 10.00	5,603	223	90%	5,804	3.98%	42,495	30.65%	-	2,739	47.19%	72	(64)
	2.5 to < 5	4,452	189	89%	4,621	3.43%	31,330	29.93%	-	2,058	44.54%	45	(40)
	5 to < 10	1,151	35	91%	1,183	6.16%	11,165	33.45%	-	680	57.53%	27	(25)
	10.00 to < 100.00	3,051	96	83%	3,130	18.25%	49,315	26.52%	-	1,835	58.61%	164	(146)
	10 to < 20	1,964	73	85%	2,026	11.73%	24,584	26.86%	-	1,078	53.21%	70	(73)
	20 to < 30	830	17	71%	841	23.36%	16,577	27.24%	-	576	68.52%	54	(40)
	30.00 to < 100.00	257	7	90%	263	52.22%	8,154	21.56%	-	180	68.57%	40	(33)
	100.00 (default)	1,706	7	26%	1,708	94.99%	95,488	50.95%	-	699	40.94%	870	(892)
Retail – Other non-SMEs sub-total		**72,456**	**3,216**	**80%**	**75,001**	**12.83%**	**399,949**	**22.15%**	**-**	**13,245**	**17.66%**	**1,172**	**(1,228)**
TOTAL		**599,162**	**118,662**	**64%**	**670,368**		**3,479,918**		**1**	**117,286**	**17.50%**	**7,739**	**(8,258)**

	12/31/2022												
F-IRB *in millions of euros*	**PD range**	**On-balance sheet exposures**	**Off-balance sheet exposures before CCF**	**Weighted average CCF**	**Exposure post CCF and post CRM**	**Weighted average PD** *(in %)*	**Number of obligors**	**Weighted average LGD** *(in %)*	**Weighted average maturity** *(in years)*	**Risk-weighted exposure amount after supplementary factors**	**Density of risk-weighted exposure**	**Expected loss amount**	**Value adjustments and provisions**
	a	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**m**
CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	159,233	37	76%	159,263	0.00%	46	45.00%	3	174	0.11%	-	-
	0.00 to < 0.10	159,184	32	75%	159,208	0.00%	43	45.00%	3	155	0.10%	-	-
	0.10 to < 0.15	49	4	81%	55	0.14%	3	41.98%	3	19	35.24%	-	-
	0.15 to < 0.25	3	-	0%	154	0.01%	2	44.95%	3	2	1.07%	-	-
	0.25 to < 0.50	650	-	0%	801	0.31%	6	44.99%	2	421	52.58%	1	-
	0.50 to < 0.75	5	10	75%	1,569	0.00%	1	44.90%	3	9	0.56%	-	-
	0.75 to < 2.50	-	-	0%	2,275	0.00%	1	44.96%	3	-	0.00%	-	-
	0.75 to < 1.75	-	-	0%	2,168	0.00%	1	44.95%	3	-	0.00%	-	-
	1.75 to < 2.5	-	-	0%	107	0.00%	-	45.00%	3	-	0.00%	-	-
	2.50 to < 10.00	3	-	50%	2,415	0.00%	9	44.97%	3	5	0.19%	-	-
	2.5 to < 5	3	-	50%	1,618	0.01%	9	44.97%	3	5	0.28%	-	-
	5 to < 10	-	-	0%	796	0.00%	-	44.97%	3	-	0.00%	-	-
	10.00 to < 100.00	-	-	0%	451	0.00%	1	44.97%	3	-	0.00%	-	-
	10 to < 20	-	-	0%	304	0.00%	1	44.98%	3	-	0.00%	-	-
	20 to < 30	-	-	0%	29	0.00%	-	44.96%	3	-	0.00%	-	-
	30.00 to < 100.00	-	-	0%	117	0.00%	-	44.96%	3	-	0.00%	-	-
	100.00 (default)	-	-	0%	631	0.00%	1	44.96%	3	-	0.00%	-	(15)
Central governments and central banks sub-total		**159,894**	**47**	**76%**	**167,559**	**0.09%**	**67**	**45.00%**	**3**	**611**	**0.36%**	**1**	**(16)**
INSTITUTIONS	0.00 to < 0.15	1,889	258	72%	2,076	0.05%	116	30.37%	3	358	17.25%	-	-
	0.00 to < 0.10	1,889	258	72%	2,076	0.05%	116	30.37%	3	358	17.25%	-	-
	0.10 to < 0.15	-	-	0%	-	0.03%	-	0.00%	3	-	20.83%	-	-
	0.15 to < 0.25	157	10	62%	165	0.20%	17	44.22%	3	70	42.61%	-	-
	0.25 to < 0.50	141	5	50%	89	0.34%	14	19.70%	3	39	43.28%	-	-
	0.50 to < 0.75	5	115	73%	163	0.33%	9	4.44%	3	52	31.91%	-	-
	0.75 to < 2.50	29	149	61%	308	0.53%	25	24.02%	3	177	57.40%	1	(1)
	0.75 to < 1.75	27	127	63%	290	0.47%	19	23.44%	3	156	53.78%	1	(1)
	1.75 to < 2.5	2	21	50%	17	1.51%	6	33.87%	3	20	118.71%	-	-
	2.50 to < 10.00	111	67	70%	327	1.58%	55	21.31%	3	187	57.16%	1	(5)
	2.5 to < 5	106	66	70%	265	1.82%	53	26.28%	3	164	61.93%	1	(4)
	5 to < 10	5	1	68%	62	0.56%	2	0.00%	3	23	36.73%	-	(1)
	10.00 to < 100.00	-	-	0%	58	0.03%	-	8.45%	3	11	19.40%	-	-
	10 to < 20	-	-	0%	45	0.03%	-	10.84%	3	9	19.14%	-	-
	20 to < 30	-	-	0%	4	0.03%	-	0.00%	3	1	20.55%	-	-
	30.00 to < 100.00	-	-	0%	9	0.03%	-	0.00%	3	2	20.19%	-	-
	100.00 (default)	2	-	0%	96	2.21%	5	17.11%	3	19	20.24%	1	(27)
Institutions sub-total		**2,335**	**604**	**70%**	**3,281**	**5.35%**	**241**	**27.21%**	**3**	**913**	**27.82%**	**4**	**(34)**

F-IRB *in millions of euros*	PD range	On-balance sheet exposures	Off-balance sheet expo-sures before CCF	Weighted average CCF	Expo-sure post CCF and post CRM	Weigh-ted average PD *(in %)*	Number of obligors	Weigh-ted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supple-mentary factors	Density of risk-weighted exposure	Expected loss amount	Value adjust-ments and provi-sions
	12/31/2022												
	a	b	c	d	e	f	g	h	i	j	k	l	m
CORPORATES – SME	0.00 to < 0.15	388	133	74%	473	0.06%	205	42.93%	3	71	15.04%	-	-
	0.00 to < 0.10	313	112	72%	399	0.05%	95	43.07%	3	53	13.19%	-	-
	0.10 to < 0.15	75	20	86%	74	0.15%	110	42.17%	3	18	25.04%	-	-
	0.15 to < 0.25	652	191	74%	622	0.18%	2,101	41.82%	3	167	26.83%	-	(1)
	0.25 to < 0.50	642	159	72%	661	0.37%	995	41.79%	3	275	41.62%	1	(1)
	0.50 to < 0.75	7,608	1,824	64%	6,778	0.61%	21,037	41.95%	3	3,252	47.98%	17	(32)
	0.75 to < 2.50	11,814	2,572	58%	10,854	1.39%	28,483	41.84%	3	7,138	65.76%	63	(90)
	0.75 to < 1.75	11,561	2,547	58%	10,600	1.37%	28,323	41.79%	3	6,903	65.12%	61	(89)
	1.75 to < 2.5	253	25	72%	255	2.18%	160	44.14%	3	235	92.47%	2	(2)
	2.50 to < 10.00	10,765	2,621	56%	9,816	4.18%	27,898	42.28%	3	8,817	89.82%	174	(225)
	2.5 to < 5	7,628	1,860	57%	7,130	3.22%	18,795	42.24%	3	6,071	85.15%	97	(128)
	5 to < 10	3,137	761	54%	2,686	6.72%	9,103	42.37%	3	2,746	102.24%	76	(97)
	10.00 to < 100.00	1,600	378	50%	1,336	22.82%	5,853	42.18%	3	1,831	137.08%	128	(138)
	10 to < 20	1,080	288	48%	912	13.21%	4,461	42.22%	3	1,201	131.67%	51	(69)
	20 to < 30	111	26	58%	92	24.00%	364	43.06%	3	145	158.17%	9	(13)
	30.00 to < 100.00	408	64	57%	333	48.86%	1,028	41.84%	3	486	146.13%	68	(56)
	100.00 (default)	1,677	287	41%	1,205	99.96%	4,077	43.01%	3	1	0.05%	518	(624)
Corporates – SME sub-total		**35,146**	**8,165**	**60%**	**31,746**	**8.62%**	**90,649**	**42.07%**	**3**	**21,552**	**67.89%**	**902**	**(1,111)**
CORPORATES – SPECIALIZED FINANCING	0.00 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.00 to < 0.10	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.10 to < 0.15	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.15 to < 0.25	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.25 to < 0.50	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.50 to < 0.75	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.75 to < 2.50	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	0.75 to < 1.75	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	1.75 to < 2.5	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	2.50 to < 10.00	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	2.5 to < 5	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	5 to < 10	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	10.00 to < 100.00	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	10 to < 20	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	20 to < 30	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	30.00 to < 100.00	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
	100.00 (default)	-	-	0%	-	0.00%	-	0.00%	-	-	0.00%	-	-
Corporates – Specialized financing sub-total		**-**	**-**	**0%**	**-**	**0.00%**	**-**	**0.00%**	**-**	**-**	**0.00%**	**-**	**-**

F-IRB *in millions of euros*	12/31/2022 PD range	On-balance sheet exposures	Off-balance sheet exposures before CCF	Weighted average CCF	Exposure post CCF and post CRM	Weighted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-weighted exposure amount after supplementary factors	Density of risk-weighted exposure	Expected loss amount	Value adjustments and provisions
	a	b	c	d	e	f	g	h	i	j	k	l	m
CORPORATES – OTHER	0.00 to < 0.15	2,973	2,054	66%	4,162	0.07%	692	44.30%	3	1,044	25.08%	1	(2)
	0.00 to < 0.10	2,418	1,925	65%	3,654	0.06%	483	44.62%	3	862	23.59%	1	(2)
	0.10 to < 0.15	556	128	82%	508	0.14%	209	42.00%	3	182	35.84%	-	-
	0.15 to < 0.25	2,736	1,494	62%	3,407	0.19%	1,258	43.82%	3	1,512	44.37%	3	(3)
	0.25 to < 0.50	2,390	590	73%	2,641	0.33%	1,062	43.31%	3	1,545	58.52%	4	(4)
	0.50 to < 0.75	4,374	1,437	68%	5,003	0.63%	4,870	42.97%	3	3,888	77.72%	14	(12)
	0.75 to < 2.50	11,286	3,472	67%	12,656	1.50%	13,766	42.89%	3	13,310	105.17%	81	(95)
	0.75 to < 1.75	9,891	3,046	67%	11,113	1.41%	13,270	42.66%	3	11,408	102.65%	66	(81)
	1.75 to < 2.5	1,396	426	67%	1,543	2.18%	496	44.52%	3	1,902	123.26%	15	(14)
	2.50 to < 10.00	7,494	1,918	62%	7,770	4.38%	11,689	43.03%	3	11,192	144.05%	146	(204)
	2.5 to < 5	5,647	1,557	62%	5,974	3.51%	8,725	42.99%	3	8,088	135.39%	90	(116)
	5 to < 10	1,847	361	62%	1,796	7.28%	2,964	43.16%	3	3,104	172.84%	56	(88)
	10.00 to < 100.00	1,870	431	62%	1,917	18.08%	4,583	41.73%	3	3,937	205.39%	144	(126)
	10 to < 20	1,508	335	63%	1,575	12.18%	3,883	41.74%	3	3,200	203.18%	80	(82)
	20 to < 30	50	19	42%	48	23.23%	193	42.88%	3	117	246.01%	5	(6)
	30.00 to < 100.00	312	77	65%	295	48.77%	507	41.50%	3	620	210.61%	59	(38)
	100.00 (default)	1,589	343	47%	1,480	99.75%	4,197	43.70%	3	4	0.25%	645	(809)
Corporates – Other sub-total		**34,713**	**11,738**	**70%**	**39,035**	**14.87%**	**42,117**	**43.16%**	**3**	**36,432**	**93.33%**	**1,039**	**(1,255)**
TOTAL		**232,088**	**20,554**	**86%**	**241,621**		**133,074**		**3**	**59,508**	**24.63%**	**1,946**	**(2,415)**

EU CR6-A – SCOPE OF THE USE OF IRB AND SA APPROACHES

		12/31/2022				
		Exposure value as defined in Article 166 of the CRR for exposures subject to the IRB approach	**Total exposure value for exposures subject to the Standardized approach and to the IRB approach**	**Percentage of total exposure value subject to the permanent partial use of the SA** *(in %)*	**Percentage of total exposure value subject to a roll-out plan** *(in %)*	**Percentage of total exposure value subject to IRB approach** *(in %)*
in millions of euros		**a**	**b**	**c**	**d**	**e**
1	Central governments or central banks	225,664	393,338	11%	32%	57%
1.1	*of which regional governments or local authorities*		*47,068*	*34%*	*66%*	*0%*
1.2	*of which Public sector entities*		*24,196*	*52%*	*47%*	*1%*
2	Institutions	31,295	53,839	4%	38%	58%
3	Corporate customers	254,928	382,057	8%	26%	67%
3.1	*of which Corporates – Specialized financing, excluding slotting approach*		*53,343*	*0%*	*45%*	*55%*
3.2	*of which Corporates – Specialized financing under slotting approach*		*227*	*0%*	*50%*	*50%*
4	Retail	509,169	532,413	4%	0%	96%
4.1	*of which Retail – Secured by SME real estate*		*70,952*	*0%*	*9%*	*91%*
4.2	*of which Retail – Secured by non-SME real estate*		*380,089*	*0%*	*20%*	*80%*
4.3	*of which Retail – Qualifying revolving exposures*		*27,579*	*0%*	*39%*	*61%*
4.4	*of which Retail – Other SMEs*		*79,837*	*0%*	*41%*	*59%*
4.5	*of which Retail – Other non-SMEs*		*505,243*	*0%*	*85%*	*15%*
5	Equities	11,273	11,273	0%	0%	100%
6	Other non-credit obligation assets	13,396	20,918	36%	0%	64%
7	**TOTAL**	**1,045,725**	**1,393,838**	**7%**	**18%**	**75%**

		12/31/2021				
		Exposure value as defined in Article 166 of the CRR for exposures subject to the IRB approach	**Total exposure value for exposures subject to the Standardized approach and to the IRB approach**	**Percentage of total exposure value subject to the permanent partial use of the SA** *(in %)*	**Percentage of total exposure value subject to a roll-out plan** *(in %)*	**Percentage of total exposure value subject to IRB approach** *(in %)*
in millions of euros		**a**	**b**	**c**	**d**	**e**
1	Central governments or central banks	233,937	397,672	9%	32%	59%
1.1	*of which regional governments or local authorities*		*49,614*	*35%*	*65%*	*0%*
1.2	*of which Public sector entities*		*23,548*	*43%*	*56%*	*1%*
2	Institutions	28,553	51,343	2%	43%	56%
3	Corporate customers	242,836	361,625	7%	26%	67%
3.1	*of which Corporates – Specialized financing, excluding slotting approach*		*54,648*	*0%*	*46%*	*54%*
3.2	*of which Corporates – Specialized financing under slotting approach*		*109*	*0%*	*47%*	*53%*
4	Retail	479,443	503,815	4%	1%	95%
4.1	*of which Retail – Secured by SME real estate*		*65,998*	*0%*	*9%*	*91%*
4.2	*of which Retail – Secured by non-SME real estate*		*359,439*	*0%*	*22%*	*78%*
4.3	*of which Retail – Qualifying revolving exposures*		*27,629*	*0%*	*38%*	*62%*
4.4	*of which Retail – Other SMEs*		*76,518*	*0%*	*39%*	*61%*
4.5	*of which Retail – Other non-SMEs*		*406,668*	*0%*	*81%*	*19%*
5	Equities	12,087	12,101	0%	0%	100%
6	Other non-credit obligation assets	13,029	20,456	36%	0%	64%
7	**TOTAL**	**1,009,885**	**1,347,012**	**7%**	**18%**	**75%**

5

EU CR7 – IRB APPROACH – EFFECT ON RISK-WEIGHTED ASSETS OF CREDIT DERIVATIVES USED AS CREDIT RISK MITIGATION TECHNIQUES

		12/31/2022	
		Risk-weighted assets before credit derivatives	Actual risk-weighted assets
in millions of euros		a	b
1	**Exposures under foundation IRB approach**	**59,738**	**59,738**
2	Central governments and central banks	613	613
3	Institutions	943	943
4	Corporate customers	58,183	58,183
4.1	*of which Corporates – SME*	*21,577*	*21,577*
4.2	*of which Corporates – Specialized financing*	*82*	*82*
5	**Exposures under advanced IRB approach**	**116,159**	**117,346**
6	Central governments and central banks	325	325
7	Institutions	2,137	2,137
8	Corporate customers	41,014	41,014
8.1	*of which Corporates – SME*	*3,152*	*3,152*
8.2	*of which Corporates – Specialized financing*	*7,041*	*7,041*
9	Retail	72,683	73,870
9.1	*of which Retail – SME – Guaranteed by real estate collateral*	*20,469*	*20,469*
9.2	*of which Retail – non-SME – Guaranteed by real estate collateral*	*27,056*	*27,056*
9.3	*of which Retail – Qualifying revolving exposures*	*849*	*1,565*
9.4	*of which Retail – SME – Other*	*11,536*	*11,536*
9.5	*of which Retail – non-SME – Other*	*12,774*	*13,245*
10	**TOTAL (INCLUDING SIMPLIFIED AND ADVANCED IRB EXPOSURE APPROACHES)**	**175,897**	**177,084**

		12/31/2021	
		Risk-weighted assets before credit derivatives	Actual risk-weighted assets
in millions of euros		a	b
1	**Exposures under foundation IRB approach**	**53,504**	**53,504**
2	Central governments and central banks	677	677
3	Institutions	785	785
4	Corporate customers	52,041	52,041
4.1	*of which Corporates – SME*	*20,329*	*20,329*
4.2	*of which Corporates – Specialized financing*	*41*	*41*
5	**Exposures under advanced IRB approach**	**110,652**	**111,765**
6	Central governments and central banks	237	237
7	Institutions	1,561	1,561
8	Corporate customers	40,686	40,686
8.1	*of which Corporates – SME*	*2,846*	*2,846*
8.2	*of which Corporates – Specialized financing*	*5,320*	*5,320*
9	Retail	68,168	69,281
9.1	*of which Retail – SME – Guaranteed by real estate collateral*	*19,007*	*19,007*
9.2	*of which Retail – non-SME – Guaranteed by real estate collateral*	*25,307*	*25,307*
9.3	*of which Retail – Qualifying revolving exposures*	*836*	*1,540*
9.4	*of which Retail – SME – Other*	*10,676*	*10,676*
9.5	*of which Retail – non-SME – Other*	*12,342*	*12,751*
10	**TOTAL (INCLUDING SIMPLIFIED AND ADVANCED IRB EXPOSURE APPROACHES)**	**164,156**	**165,268**

EU CR7-A – IRB APPROACH – DISCLOSURE OF THE EXTENT OF THE USE OF CRM TECHNIQUES

			12/31/2022											
			Credit risk mitigation techniques											Credit risk Mitigation methods in the calculation RWAs
			Credit protection (funded)									Credit protection (unfunded)		
A-IRB *in millions of euros*		Total exposures	Part of expo-sures covered by financial collaterals *(in %)*	Part of expo-sures covered by other eligible collaterals *(in %)*	Part of expo-sures covered by immovable property collaterals *(in %)*	Part of expo-sures covered by receivables *(in %)*	Part of expo-sures covered by other physical collateral *(in %)*	Part of expo-sures covered by other funded credit protection *(in %)*	Part of expo-sures covered by cash on deposit *(in %)*	Part of expo-sures covered by life insurance policies *(in %)*	Part of exposures covered by instru-ments held by a third party *(in %)*	Part of expo-sures covered by guaran-tees *(in %)*	Part of exposures covered by credit deriva-tives *(in %)*	Risk-weighted assets with substi-tution effects (reduction and substitution effects)
		a	b	c	d	e	f	g	h	i	j	k	l	n
1	Central governments and central banks	55,833	0.00%	0.09%	0.00%	0.06%	0.03%	0.07%	0.07%	0.00%	0.00%	0.00%	0.00%	325
2	Institutions	7,708	0.00%	0.62%	0.00%	0.00%	0.62%	0.05%	0.05%	0.00%	0.00%	0.00%	0.00%	2,137
3	Corporate customers	106,520	2.43%	24.79%	9.34%	8.70%	6.76%	0.89%	0.89%	0.00%	0.00%	0.00%	0.00%	41,014
3.1	*of which Corporates – SME*	*6,041*	*0.00%*	*40.58%*	*14.66%*	*0.00%*	*25.92%*	*0.01%*	*0.01%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*3,152*
3.2	*of which Corporates – Specialized financing*	*19,980*	*0.00%*	*87.06%*	*33.75%*	*43.22%*	*10.09%*	*0.63%*	*0.63%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*7,041*
3.3	*of which Corporates – Other*	*80,498*	*3.22%*	*8.15%*	*2.88%*	*0.78%*	*4.49%*	*1.03%*	*1.03%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*30,821*
4	Retail	500,307	0.15%	14.57%	13.25%	0.02%	1.29%	0.29%	0.00%	0.00%	0.00%	52.10%	0.00%	73,870
4.1	*of which Retail – SME Real estate*	*64,710*	*0.00%*	*41.77%*	*37.71%*	*0.00%*	*4.06%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*43.30%*	*0.00%*	*20,469*
4.2	*of which Retail – Non-SME Real estate*	*303,715*	*0.00%*	*13.83%*	*13.80%*	*0.00%*	*0.03%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*69.03%*	*0.00%*	*27,056*
4.3	*of which Retail – Qualifying revolving exposures*	*11,189*	*0.01%*	*0.76%*	*0.00%*	*0.00%*	*0.76%*	*0.01%*	*0.00%*	*0.00%*	*0.00%*	*0.02%*	*0.00%*	*1,565*
4.4	*of which Retail – Other SMEs*	*45,693*	*0.68%*	*6.43%*	*0.00%*	*0.05%*	*6.39%*	*1.08%*	*0.00%*	*0.00%*	*0.00%*	*35.63%*	*0.00%*	*11,536*
4.5	*of which Retail – Other non-SMEs*	*75,001*	*0.58%*	*1.10%*	*0.00%*	*0.13%*	*0.98%*	*1.24%*	*0.00%*	*0.00%*	*0.00%*	*8.91%*	*0.00%*	*13,245*
5	**TOTAL**	**670,368**	**0.50%**	**14.83%**	**11.38%**	**1.40%**	**2.05%**	**0.36%**	**0.15%**	**0.00%**	**0.00%**	**38.88%**	**0.00%**	**117,346**

		12/31/2022												
			Credit risk mitigation techniques											Credit risk Mitigation methods in the calculation RWAs
			Credit protection (funded)								Credit protection (unfunded)			
F-IRB *in millions of euros*		Total expo-sures	Part of expo-sures covered by financial collaterals *(in %)*	Part of expo-sures covered by other eligible collaterals *(in %)*	Part of expo-sures covered by immo-vable property collaterals *(in %)*	Part of expo-sures covered by recei-vables *(in %)*	Part of expo-sures covered by other physical collateral *(in %)*	Part of expo-sures covered by other funded credit protection *(in %)*	Part of expo-sures covered by cash on deposit *(in %)*	Part of expo-sures covered by life insurance policies *(in %)*	Part of expo-sures covered by instru-ments held by a third party *(in %)*	Part of expo-sures covered by guaran-tees *(in %)*	Part of expo-sures covered by credit deriva-tives *(in %)*	Risk-weighted assets with substitution effects (reduction and substitution effects)
		a	b	c	d	e	f	g	h	i	j	k	l	n
1	Central governments and central banks	167,769	0.00%	0.04%	0.02%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	613
2	Institutions	3,432	0.01%	5.01%	1.53%	0.26%	3.22%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	943
3	Corporate customers	71,118	0.75%	22.57%	14.42%	1.58%	6.57%	0.76%	0.76%	0.00%	0.00%	0.00%	0.00%	58,183
3.1	*of which Corporates – SME*	*31,795*	*1.03%*	*29.21%*	*18.07%*	*1.49%*	*9.65%*	*1.04%*	*1.04%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*21,577*
3.2	*of which Corporates – Specialized financing*	*115*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*82*
3.3	*of which Corporates – Other*	*39,208*	*0.52%*	*17.26%*	*11.50%*	*1.66%*	*4.10%*	*0.53%*	*0.53%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*36,523*
4	**TOTAL**	**242,319**	**0.22%**	**6.73%**	**4.27%**	**0.47%**	**1.99%**	**0.22%**	**0.22%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**59,738**

		12/31/2021												
			Credit risk mitigation techniques											Credit risk Mitigation methods in the calculation RWAs
			Credit protection (funded)								Credit protection (unfunded)			
A-IRB *in millions of euros*		**Total exposures**	**Part of expo-sures covered by financial collaterals** *(in %)*	**Part of expo-sures covered by other eligible collaterals** *(in %)*	**Part of expo-sures covered by immovable property collaterals** *(in %)*	**Part of expo-sures covered by receivables** *(in %)*	**Part of expo-sures covered by other physical collateral** *(in %)*	**Part of expo-sures covered by other funded credit protection** *(in %)*	**Part of expo-sures covered by cash on deposit** *(in %)*	**Part of expo-sures covered by life insurance policies** *(in %)*	**Part of exposures covered by instru-ments held by a third party** *(in %)*	**Part of expo-sures covered by guaran-tees** *(in %)*	**Part of exposures covered by credit deriva-tives** *(in %)*	**Risk-weighted assets with subst-itution effects (reduction and substitution effects)**
		a	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**n**
1	Central governments and central banks	58,551	0.00%	0.13%	0.00%	0.04%	0.10%	0.10%	0.10%	0.00%	0.00%	0.00%	0.00%	237
2	Institutions	7,492	0./00%	1.07%	0.00%	0.03%	1.03%	2.78%	2.78%	0.00%	0.00%	0.00%	0.00%	1,561
3	Corporate customers	103,613	2.54%	25.82%	9.99%	8.77%	7.05%	1.17%	1.17%	0.00%	0.00%	0.00%	0.00%	40,686
3.1	*of which Corporates – SME*	*5,527*	*0.00%*	*42.39%*	*17.42%*	*0.00%*	*24.97%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2,846*
3.2	*of which Corporates – Specialized financing*	*19,482*	*0.00%*	*91.92%*	*36.30%*	*43.00%*	*12.62%*	*0.64%*	*0.64%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*5,320*
3.3	*of which Corporates – Other*	*78,604*	*3.35%*	*8.27%*	*2.95%*	*0.90%*	*4.41%*	*1.38%*	*1.38%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*32,519*
4	Retail	470,584	0.19%	14.96%	13.61%	0.02%	1.33%	0.29%	0.00%	0.00%	0.00%	50.79%	0.00%	69,281
4.1	*of which Retail – SME Real estate*	*59,774*	*0.00%*	*46.18%*	*42.08%*	*0.00%*	*4.09%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*40.25%*	*0,00%*	*19,007*
4.2	*of which Retail – Non-SME Real estate*	*278,290*	*0.00%*	*14.01%*	*13.97%*	*0.00%*	*0.04%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*68.37%*	*0.00%*	*25,307*
4.3	*of which Retail – Qualifying revolving exposures*	*11,217*	*0.01%*	*0.89%*	*0.00%*	*0.00%*	*0.89%*	*0.01%*	*0.00%*	*0.00%*	*0.00%*	*0.03%*	*0.00%*	*1,540*
4.4	*of which Retail – Other SMEs*	*45,285*	*0.85%*	*6.36%*	*0.00%*	*0.05%*	*6.32%*	*1.11%*	*0.00%*	*0.00%*	*0.00%*	*36.33%*	*0.00%*	*10,676*
4.5	*of which Retail – Other non-SMEs*	*76,018*	*0.66%*	*1.11%*	*0.00%*	*0.12%*	*0.99%*	*1.14%*	*0.00%*	*0.00%*	*0.00%*	*10.82%*	*0.00%*	*12,751*
5	**TOTAL**	**640,241**	**0.55%**	**15.20%**	**11.62%**	**1.44%**	**2.14%**	**0.44%**	**0.23%**	**0.00%**	**0.00%**	**37.33%**	**0.00%**	**111,765**

		12/31/2021												
			Credit risk mitigation techniques											Credit risk Mitigation methods in the calculation RWAs
			Credit protection (funded)									Credit protection (unfunded)		
F-IRB		Total expo-sures	Part of expo-sures covered by financial collaterals *(in %)*	Part of expo-sures covered by other eligible collaterals *(in %)*	Part of expo-sures covered by immo-vable property collaterals *(in %)*	Part of expo-sures covered by recei-vables *(in %)*	Part of expo-sures covered by other physical collateral *(in %)*	Part of expo-sures covered by other funded credit protection *(in %)*	Part of expo-sures covered by cash on deposit *(in %)*	Part of expo-sures covered by life insurance policies *(in %)*	Part of expo-sures covered by instru-ments held by a third party *(in %)*	Part of expo-sures covered by guaran-tees *(in %)*	Part of expo-sures covered by credit deriva-tives *(in %)*	Risk-weighted assets with substitution effects (reduction and substitution effects)
in millions of euros		a	b	c	d	e	f	g	h	i	j	k	l	n
1	Central governments and central banks	177,476	0.00%	0.04%	0.02%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	677
2	Institutions	2,661	0.01%	3.71%	0.82%	0.05%	2.84%	0.01%	0.01%	0.00%	0.00%	0.00%	0,00%	785
3	Corporate customers	64,052	0.75%	21.76%	13.40%	1.32%	7.04%	0.76%	0.76%	0.00%	0.00%	0.00%	0.00%	52,041
3.1	*of which Corporates – SME*	*29,947*	*0.93%*	*27.21%*	*15.95%*	*1.29%*	*9.98%*	*0.94%*	*0.94%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*20,329*
3.2	*of which Corporates – Specialized financing*	*53*	*0.00%*	*3.95%*	*0.00%*	*0.00%*	*3.95%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*41*
3.3	*of which Corporates – Other*	*34,052*	*0.59%*	*16.99%*	*11.18%*	*1.36%*	*4,45%*	*0.60%*	*0.60%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*31,672*
4	**TOTAL**	**244,190**	**0.20%**	**5.78%**	**3.53%**	**0.35%**	**1.89%**	**0.20%**	**0.20%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**53,504**

EU CR8 – STATEMENT OF RISK -WEIGHTED FLOWS RELATING TO CREDIT RISK EXPOSURES UNDER THE IRB APPROACH

		Risk-Weighted Assets
in millions of euros		a
1	**12/31/2021**	**165,268**
2	Asset size (+/-)	22,068
3	Asset quality (+/-)	(6,292)
4	Model updates (+/-)	(298)
5	Methodology and policies (+/-)	-
6	Acquisitions and disposals (+/-)	-
7	Foreign exchange movements (+/-)	550
8	Other (+/-)	(4,212)
9	**12/31/2022**	**177,084**

EU CR9_IRB APPROACH – EX-POST CONTROL OF PDS BY EXPOSURE CLASS (FIXED PD SCALE)

A-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *in millions of euros*	PD range		o/w number of obligors defaulting during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	54	-	0%	0%	0%	0%
	0.00 to < 0.10	54	-	0%	0%	0%	0%
	0.10 to < 0.15	-	-	0%	0%	0%	0%
	0.15 to < 0.25	4	-	0%	0%	0%	0%
	0.25 to < 0.50	2	-	0%	0%	0%	0%
	0.50 to < 0.75	-	-	0%	0%	0%	0%
	0.75 to < 2.50	3	-	0%	0%	1%	0%
	0.75 to < 1.75	2	-	0%	0%	1%	0%
	1.75 to < 2.5	1	-	0%	0%	2%	0%
	2.50 to < 10.00	11	-	0%	0%	4%	0%
	2.5 to < 5	10	-	0%	0%	3%	0%
	5 to < 10	1	-	0%	0%	8%	0%
	10.00 to < 100.00	10	1	10%	16%	23%	4%
	10 to < 20	-	-	0%	0%	0%	0%
	20 to < 30	10	1	10%	27%	23%	4%
	30.00 to < 100.00	-	-	0%	0%	0%	0%
	100.00 (default)	10	-	0%	22%	100%	100%
INSTITUTIONS	0.00 to < 0.15	224	-	0%	0%	0%	0%
	0.00 to < 0.10	224	-	0%	0%	0%	0%
	0.10 to < 0.15	-	-	0%	0%	0%	0%
	0.15 to < 0.25	44	-	0%	0%	0%	0%
	0.25 to < 0.50	42	-	0%	0%	0%	0%
	0.50 to < 0.75	27	1	4%	0%	1%	1%
	0.75 to < 2.50	56	-	0%	0%	2%	0%
	0.75 to < 1.75	32	-	0%	0%	1%	0%
	1.75 to < 2.5	24	-	0%	0%	2%	1%
	2.50 to < 10.00	70	-	0%	2%	4%	0%
	2.5 to < 5	57	-	0%	2%	3%	0%
	5 to < 10	13	-	0%	3%	6%	0%
	10.00 to < 100.00	1	-	0%	0%	11%	0%
	10 to < 20	1	-	0%	0%	11%	0%
	20 to < 30	-	-	0%	0%	0%	0%
	30.00 to < 100.00	-	-	0%	0%	0%	0%
	100.00 (default)	9	-	0%	42%	100%	100%

A-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *in millions of euros*	PD range		o/w number of obligors defaulting during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
CORPORATES – SME	0.00 to < 0.15	64	1	2%	0%	0%	1%
	0.00 to < 0.10	59	1	2%	0%	0%	1%
	0.10 to < 0.15	5	-	0%	0%	0%	0%
	0.15 to < 0.25	209	-	0%	0%	0%	0%
	0.25 to < 0.50	117	1	1%	0%	0%	0%
	0.50 to < 0.75	2,330	11	1%	1%	1%	0%
	0.75 to < 2.50	3,069	34	1%	1%	1%	1%
	0.75 to < 1.75	3,030	34	1%	1%	1%	1%
	1.75 to < 2.5	39	-	0%	2%	2%	1%
	2.50 to < 10.00	3,764	118	3%	4%	4%	3%
	2.5 to < 5	2,950	68	2%	4%	3%	2%
	5 to < 10	814	50	6%	7%	7%	6%
	10.00 to < 100.00	855	58	7%	15%	15%	7%
	10 to < 20	759	41	5%	13%	12%	6%
	20 to < 30	37	11	30%	0%	24%	18%
	30.00 to < 100.00	59	6	10%	31%	44%	17%
	100.00 (default)	554	-	0%	100%	100%	100%
CORPORATES – SPECIALIZED FINANCING	0.00 to < 0.15	56	-	0%	0%	0%	0%
	0.00 to < 0.10	56	-	0%	0%	0%	0%
	0.10 to < 0.15	-	-	0%	0%	0%	0%
	0.15 to < 0.25	68	-	0%	0%	0%	0%
	0.25 to < 0.50	141	-	0%	0%	0%	0%
	0.50 to < 0.75	267	1	0%	1%	1%	0%
	0.75 to < 2.50	405	2	1%	1%	1%	2%
	0.75 to < 1.75	304	2	1%	1%	1%	1%
	1.75 to < 2.5	101	-	0%	2%	2%	3%
	2.50 to < 10.00	129	10	8%	4%	4%	7%
	2.5 to < 5	81	6	7%	3%	3%	6%
	5 to < 10	48	4	8%	6%	6%	10%
	10.00 to < 100.00	3	-	0%	10%	14%	0%
	10 to < 20	3	-	0%	10%	14%	0%
	20 to < 30	-	-	0%	0%	0%	0%
	30.00 to < 100.00	-	-	0%	0%	0%	0%
	100.00 (default)	39	-	0%	100%	100%	100%

A-IRB		12/31/2022					
		Number of obligors at the end of the previous year					
Exposure classes *in millions of euros*	PD range		o/w number of obligors defaulting during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
CORPORATES – OTHER	0.00 to < 0.15	559	-	0%	0%	0%	0%
	0.00 to < 0.10	537	-	0%	0%	0%	0%
	0.10 to < 0.15	22	-	0%	0%	0%	0%
	0.15 to < 0.25	296	-	0%	0%	0%	1%
	0.25 to < 0.50	285	-	0%	0%	0%	0%
	0.50 to < 0.75	734	3	0%	0%	1%	1%
	0.75 to < 2.50	1,512	18	1%	1%	1%	1%
	0.75 to < 1.75	1,369	17	1%	1%	1%	1%
	1.75 to < 2.5	143	1	1%	2%	2%	2%
	2.50 to < 10.00	3,148	90	3%	4%	4%	3%
	2.5 to < 5	2,674	59	2%	3%	4%	3%
	5 to < 10	474	31	7%	6%	7%	7%
	10.00 to < 100.00	796	44	6%	10%	14%	3%
	10 to < 20	737	34	5%	8%	12%	2%
	20 to < 30	18	2	11%	25%	24%	15%
	30.00 to < 100.00	41	8	20%	16%	39%	19%
	100.00 (default)	383	-	0%	95%	100%	100%
RETAIL – SME REAL ESTATE	0.00 TO < 0.15	-	-	0%	0%	0%	0%
	0.00 TO < 0.10	-	-	0%	0%	0%	0%
	0.10 TO < 0.15	-	-	0%	0%	0%	0%
	0.15 TO < 0.25	48,280	45	0%	0%	0%	0%
	0.25 TO < 0.50	48,697	71	0%	0%	0%	0%
	0.50 TO < 0.75	15,278	70	1%	1%	1%	0%
	0.75 TO < 2.50	115,446	439	0%	1%	1%	0%
	0.75 TO < 1.75	89,238	279	0%	1%	1%	0%
	1.75 to < 2.5	26,208	160	1%	2%	2%	1%
	2.50 to < 10.00	68,007	845	1%	5%	5%	1%
	2.5 to < 5	38,798	293	1%	4%	4%	1%
	5 to < 10	29,209	552	2%	7%	7%	2%
	10.00 to < 100.00	24,969	2,203	9%	23%	24%	9%
	10 to < 20	11,471	535	5%	15%	15%	4%
	20 to < 30	9,829	707	7%	24%	24%	7%
	30.00 to < 100.00	3,669	961	26%	49%	50%	25%
	100.00 (default)	9,925	-	0%	100%	100%	100%

A-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *in millions of euros*	PD range		o/w number of obligors defaulting during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
RETAIL – NON-SME REAL ESTATE	0.00 to < 0.15	1,461,886	1,577	0%	0%	0%	0%
	0.00 to < 0.10	860,627	877	0%	0%	0%	0%
	0.10 to < 0.15	601,259	700	0%	0%	0%	0%
	0.15 to < 0.25	525,783	932	0%	0%	0%	0%
	0.25 to < 0.50	233,833	651	0%	0%	0%	0%
	0.50 to < 0.75	350,223	1,365	0%	1%	1%	0%
	0.75 to < 2.50	224,284	1,911	1%	2%	2%	1%
	0.75 to < 1.75	152,107	941	1%	1%	1%	1%
	1.75 to < 2.5	72,177	970	1%	2%	2%	2%
	2.50 to < 10.00	142,074	2,072	2%	4%	4%	2%
	2.5 to < 5	109,494	1,453	1%	3%	3%	2%
	5 to < 10	32,580	619	2%	6%	7%	2%
	10.00 to < 100.00	72,505	6,346	9%	20%	21%	11%
	10 to < 20	42,321	2,407	6%	12%	13%	7%
	20 to < 30	23,336	1,956	8%	23%	24%	10%
	30.00 to < 100.00	6,848	1,983	29%	60%	61%	37%
	100.00 (default)	30,567	-	0%	100%	100%	100%
RETAIL — ELIGIBLE REVOLVING EXPOSURES	0.00 to < 0.15	8,175,260	1,050	0%	0%	0%	0%
	0.00 to < 0.10	4,363,127	340	0%	0%	0%	0%
	0.10 to < 0.15	3,812,133	710	0%	0%	0%	0%
	0.15 to < 0.25	2,589,434	915	0%	0%	0%	0%
	0.25 to < 0.50	1,234,795	870	0%	0%	0%	0%
	0.50 to < 0.75	5,465,195	5,337	0%	1%	1%	0%
	0.75 to < 2.50	2,055,957	8,361	0%	1%	2%	1%
	0.75 to < 1.75	1,417,051	3,551	0%	1%	1%	0%
	1.75 to < 2.5	638,906	4,810	1%	2%	2%	1%
	2.50 to < 10.00	1,713,387	15,982	1%	2%	4%	2%
	2.5 to < 5	1,365,287	10,809	1%	3%	3%	1%
	5 to < 10	348,100	5,173	2%	1%	7%	3%
	10.00 to < 100.00	1,135,849	52,669	5%	15%	19%	7%
	10 to < 20	642,531	20,612	3%	9%	12%	5%
	20 to < 30	426,505	16,339	4%	19%	24%	5%
	30.00 to < 100.00	66,813	15,718	24%	27%	61%	32%
	100.00 (default)	136,014	-	0%	42%	100%	100%

A-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *in millions of euros*	PD range		o/w number of obligors defaulting during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
RETAIL – OTHER SMES	0.00 to < 0.15	-	-	0%	0%	0%	0%
	0.00 to < 0.10	-	-	0%	0%	0%	0%
	0.10 to < 0.15	-	-	0%	0%	0%	0%
	0.15 to < 0.25	122,061	118	0%	0%	0%	0%
	0.25 to < 0.50	348,267	815	0%	0%	0%	0%
	0.50 to < 0.75	158,011	331	0%	1%	1%	0%
	0.75 to < 2.50	695,333	5,575	1%	1%	1%	1%
	0.75 to < 1.75	505,025	3,189	1%	1%	1%	1%
	1.75 to < 2.5	190,308	2,386	1%	2%	2%	1%
	2.50 to < 10.00	397,541	10,973	3%	5%	5%	3%
	2.5 to < 5	249,396	4,097	2%	3%	4%	2%
	5 to < 10	148,145	6,876	5%	7%	7%	4%
	10.00 to < 100.00	179,112	22,179	12%	23%	25%	12%
	10 to < 20	76,541	6,322	8%	16%	16%	7%
	20 to < 30	74,347	7,104	10%	25%	25%	10%
	30.00 to < 100.00	28,224	8,753	31%	47%	50%	31%
	100.00 (default)	90,911	-	0%	100%	100%	100%
RETAIL – OTHER NON-SMES	0.00 to < 0.15	2,283,197	1,584	0%	0%	0%	0%
	0.00 to < 0.10	1,128,837	602	0%	0%	0%	0%
	0.10 to < 0.15	1,154,360	982	0%	0%	0%	0%
	0.15 to < 0.25	586,985	649	0%	0%	0%	0%
	0.25 to < 0.50	411,696	859	0%	0%	0%	0%
	0.50 to < 0.75	990,086	3,382	0%	1%	1%	0%
	0.75 to < 2.50	669,786	6,142	1%	2%	2%	1%
	0.75 to < 1.75	391,596	2,282	1%	1%	1%	1%
	1.75 to < 2.5	278,190	3,860	1%	2%	2%	2%
	2.50 to < 10.00	501,992	8,165	2%	4%	4%	2%
	2.5 to < 5	404,792	5,706	1%	3%	3%	2%
	5 to < 10	97,200	2,459	3%	6%	7%	3%
	10.00 to < 100.00	311,525	28,675	9%	18%	18%	13%
	10 to < 20	199,287	10,941	6%	12%	12%	7%
	20 to < 30	94,780	10,838	11%	23%	23%	16%
	30.00 to < 100.00	17,458	6,896	40%	52%	61%	46%
	100.00 (default)	158,142	-	0%	95%	100%	100%

F-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *en millions of euros*	PD range		o/w number of obligors who defaulted during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	47	-	0%	0%	0%	0%
	0.00 to < 0.10	44	-	0%	0%	0%	0%
	0.10 to < 0.15	3	-	0%	0%	0%	0%
	0.15 to < 0.25	3	-	0%	0%	0%	0%
	0.25 to < 0.50	5	-	0%	0%	0%	0%
	0.50 to < 0.75	1	-	0%	0%	1%	0%
	0.75 to < 2.50	-	-	0%	0%	0%	0%
	0.75 to < 1.75	-	-	0%	0%	0%	0%
	1.75 to < 2.5	-	-	0%	0%	0%	0%
	2.50 to < 10.00	14	-	0%	0%	3%	0%
	2.5 to < 5	14	-	0%	0%	3%	0%
	5 to < 10	-	-	0%	0%	0%	0%
	10.00 to < 100.00	-	-	0%	0%	0%	0%
	10 to < 20	-	-	0%	0%	0%	0%
	20 to < 30	-	-	0%	0%	0%	0%
	30.00 to < 100.00	-	-	0%	0%	0%	0%
	100.00 (default)	1	-	0%	0%	100%	100%
INSTITUTIONS	0.00 to < 0.15	113	1	1%	0%	0%	0%
	0.00 to < 0.10	111	-	0%	0%	0%	0%
	0.10 to < 0.15	2	1	50%	0%	0%	4%
	0.15 to < 0.25	12	-	0%	0%	0%	1%
	0.25 to < 0.50	15	-	0%	0%	0%	1%
	0.50 to < 0.75	8	-	0%	0%	1%	2%
	0.75 to < 2.50	29	-	0%	1%	2%	1%
	0.75 to < 1.75	18	-	0%	0%	1%	1%
	1.75 to < 2.5	11	-	0%	2%	2%	2%
	2.50 to < 10.00	60	2	3%	2%	3%	1%
	2.5 to < 5	56	1	2%	2%	3%	1%
	5 to < 10	4	1	25%	1%	7%	5%
	10.00 to < 100.00	-	-	0%	0%	0%	0%
	10 to < 20	-	-	0%	0%	0%	0%
	20 to < 30	-	-	0%	0%	0%	0%
	30.00 to < 100.00	-	-	0%	0%	0%	0%
	100.00 (default)	6	-	0%	2%	100%	100%

F-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *en millions of euros*	PD range		o/w number of obligors who defaulted during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	**b**	**c**	**d**	**e**	**f**	**g**	**h**
CORPORATES – SME	0.00 to < 0.15	179	4	2%	0%	0%	0%
	0.00 to < 0.10	137	3	2%	0%	0%	1%
	0.10 to < 0.15	42	1	2%	0%	0%	0%
	0.15 to < 0.25	1,811	1	0%	0%	0%	0%
	0.25 to < 0.50	894	5	1%	0%	0%	0%
	0.50 to < 0.75	19,442	40	0%	1%	1%	0%
	0.75 to < 2.50	27,451	216	1%	1%	1%	1%
	0.75 to < 1.75	27,269	215	1%	1%	1%	1%
	1.75 to < 2.5	182	1	1%	2%	2%	1%
	2.50 to < 10.00	25,543	682	3%	4%	4%	3%
	2.5 to < 5	17,174	314	2%	3%	3%	2%
	5 to < 10	8,369	368	4%	7%	7%	4%
	10.00 to < 100.00	5,173	370	7%	23%	18%	9%
	10 to < 20	4,178	252	6%	13%	13%	7%
	20 to < 30	356	52	15%	24%	24%	15%
	30.00 to < 100.00	639	66	10%	49%	48%	17%
	100.00 (default)	3,496	-	0%	100%	100%	100%
CORPORATES – SPECIALIZED FINANCING	0.00 to < 0.15	-	-	0%	0%	0%	0%
	0.00 to < 0.10	-	-	0%	0%	0%	0%
	0.10 to < 0.15	-	-	0%	0%	0%	0%
	0.15 to < 0.25	1	-	0%	0%	0%	0%
	0.25 to < 0.50	1	-	0%	0%	0%	0%
	0.50 to < 0.75	-	-	0%	0%	0%	0%
	0.75 to < 2.50	3	-	0%	0%	1%	0%
	0.75 to < 1.75	3	-	0%	0%	1%	0%
	1.75 to < 2.5	-	-	0%	0%	0%	0%
	2.50 to < 10.00	-	-	0%	0%	0%	0%
	2.5 to < 5	-	-	0%	0%	0%	0%
	5 to < 10	-	-	0%	0%	0%	0%
	10.00 to < 100.00	-	-	0%	0%	0%	0%
	10 to < 20	-	-	0%	0%	0%	0%
	20 to < 30	-	-	0%	0%	0%	0%
	30.00 to < 100.00	-	-	0%	0%	0%	0%
	100.00 (default)	-	-	0%	0%	0%	0%

F-IRB	12/31/2022						
		Number of obligors at the end of the previous year					
Exposure classes *en millions of euros*	PD range		o/w number of obligors who defaulted during the year	Average observed default rate *(in %)*	Weighted average PD *(in %)*	Average PD *(in %)*	Default rate annual historical average *(in %)*
a	b	c	d	e	f	g	h
CORPORATES – OTHER	0.00 to < 0.15	577	2	0%	0%	0%	0%
	0.00 to < 0.10	383	-	0%	0%	0%	0%
	0.10 to < 0.15	194	2	1%	0%	0%	1%
	0.15 to < 0.25	1,065	-	0%	0%	0%	0%
	0.25 to < 0.50	959	2	0%	0%	0%	0%
	0.50 to < 0.75	5,180	12	0%	1%	1%	0%
	0.75 to < 2.50	13,814	68	1%	2%	2%	1%
	0.75 to < 1.75	13,409	68	1%	1%	2%	1%
	1.75 to < 2.5	405	-	0%	2%	2%	1%
	2.50 to < 10.00	11,584	190	2%	4%	5%	2%
	2.5 to < 5	8,569	92	1%	4%	4%	1%
	5 to < 10	3,015	98	3%	7%	7%	4%
	10.00 to < 100.00	4,253	142	3%	18%	16%	5%
	10 to < 20	3,717	83	2%	12%	12%	3%
	20 to < 30	136	11	8%	23%	23%	14%
	30.00 to < 100.00	400	48	12%	49%	47%	17%
	100.00 (default)	5,092	-	0%	100%	100%	100%

BPCE16 – AVERAGE PD AND LGD BROKEN DOWN BY GEOGRAPHICAL AREA

	12/31/2022		
in millions of euros	Performing exposures	Average PD	Average LGD
France	557,745	1.7%	15.3%
European Institutions	31,935	0.0%	8.6%
Europe excluding France	42,838	0.8%	28.4%
North & South America	48,203	0.6%	21.6%
Asia	13,620	0.3%	39.0%
Africa & the Middle East	8,781	0.6%	33.8%
Oceania	2,223	0.5%	33.2%
IRBA	**705,345**	**1.5%**	**16.6%**
France	116,536	1.8%	
European Institutions	121,684	0.0%	
Europe excluding France	8,402	0.8%	
North & South America	10,824	0.0%	
Asia	816	0.1%	
Africa & the Middle East	1,797	3.1%	
Oceania	60	0.0%	
IRBF	**260,119**	**0.8%**	
TOTAL	**965,464**	**0**	

	12/31/2021		
in millions of euros	Performing exposures	Average PD	Average LGD
France	524,966	1.7%	15.4%
European Institutions	35,842	0.0%	8.6%
Europe excluding France	40,734	0.7%	27.1%
North & South America	45,598	0.6%	21.1%
Asia	13,314	0.3%	37.5%
Africa & the Middle East	9,119	0.7%	31.4%
Oceania	2,400	0.7%	30.4%
IRBA	**671,973**	**1.4%**	**16.5%**
France	108,992	1.6%	
European Institutions	132,944	0.0%	
Europe excluding France	7,916	0.8%	
North & South America	10,200	0.0%	
Asia	634	0.2%	
Africa & the Middle East	1,754	2.3%	
Oceania	66	0.0%	
IRBF	**262,505**	**0.6%**	
TOTAL	**934,478**		

BPCE17 – EX-POST CONTROL OF LGDS BY EXPOSURE CLASS

This table provides an overall summary of the system's performance but differs from the Group's annual backtesting exercises, which are carried out on a model-by-model basis and not globally by portfolio. The table nevertheless allows a comparison between the estimates and the actual results for each internal parameter over a long-term period and on a significant and representative part of each exposure category.

The results are derived from the data warehouses used for modeling from the set of performing customers for the default rate and PD, and from the set of defaulting customers for the LGD. These results also take into account the latest regulatory changes (guidance on Probability of Default [PD] and Loss Given Default [LGD] estimates).

	12/31/2022					
Portfolio	**Actual default rate**	**Estimated probability of default**	**Estimated LGD**	**Actual LGD**	**Actual EAD/ Estimated EAD**	**Actual CCF/ Estimated CCF**
Sovereigns	0.52%	2.23%	65.20%	40.20%	N/A	66.47%
Banks	0.18%	0.50%	64.96%	41.31%	N/A	66.47%
Very large corporates	0.60%	0.67%	32.57%	29.68%	N/A	66.47%
Small and medium-sized companies	2.91%	3.71%	N/A	N/A	N/A	N/A
Retail Professional	4.13%	5.07%	25.70%	16.09%	75.87%	46.49%
Retail Individual	1.40%	2.03%	20.73%	13.80%	81.42%	54.86%

	12/31/2021					
Portfolio	**Actual default rate**	**Estimated probability of default**	**Estimated LGD**	**Actual LGD**	**Actual EAD/ Estimated EAD**	**Actual CCF/ Estimated CCF**
Sovereigns	0.19%	6.41%	48.74%	30.16%	N/A	62.73%
Banks	0.23%	1.01%	63.68%	34.47%	N/A	62.73%
Very large corporates	0.51%	0.61%	39.19%	33.04%	N/A	62.73%
Small and medium-sized companies	3.12%	3.84%	N/A	N/A	N/A	N/A
Retail Professional	4.26%	5.18%	22.79%	13.48%	75.87%	46.51%
Retail Individual	1.46%	2.05%	22.06%	14.35%	81.42%	53.32%

This table provides an overall summary of the system's performance but differs from the Group's annual backtesting exercises, which are carried out on a model-by-model basis and not globally by portfolio. The table nevertheless allows a comparison between the estimates and the actual results for each internal parameter over a long-term period and on a significant and representative part of each exposure category. The results are derived from the data warehouses used for modeling from the set of performing customers for the default rate and PD, and from the set of defaulting customers for the LGD and EAD concepts.

Specialized financing

EU CR10 – SPECIALIZED AND EQUITY FINANCING EXPOSURES SUBJECT TO THE SIMPLE WEIGHTING METHOD

CR10.1	12/31/2022						
Specialized financing: Project finance (Slotting approach)							
Regulatory categories *in millions of euros*	**Residual maturity**	**On-balance sheet exposures** a	**Off-balance sheet exposures** b	**Risk weight** c	**Exposure value** d	**Weighted-exposure amount** e	**Expected loss amount** f
Class 1	Less than 2.5 years	-	-	50%	-	-	-
	Greater than or equal to 2.5 years	17	-	70%	17	12	-
Class 2	Less than 2.5 years	-	-	70%	-	-	-
	Greater than or equal to 2.5 years	26	4	90%	31	28	-
Class 3	Less than 2.5 years	-	-	115%	-	-	-
	Greater than or equal to 2.5 years	-	-	115%	-	-	-
Class 4	Less than 2.5 years	-	-	250%	-	-	-
	Greater than or equal to 2.5 years	-	-	250%	-	-	-
Class 5	Less than 2.5 years	-	-	0%	-	-	-
	Greater than or equal to 2.5 years	-	-	0%	-	-	-
TOTAL	**LESS THAN 2.5 YEARS**	**-**	**-**		**-**	**-**	**-**
	GREATER THAN OR EQUAL TO 2.5 YEARS	**43**	**4**		**48**	**39**	**-**

CR10.1	12/31/2021						
Specialized financing: Project finance (Slotting approach)							
Regulatory categories *in millions of euros*	**Residual maturity**	**On-balance sheet exposures** a	**Off-balance sheet exposures** b	**Risk weight** c	**Exposure value** d	**Weighted-exposure amount** e	**Expected loss amount** f
Class 1	Less than 2.5 years	-	-	50%	-	-	-
	Greater than or equal to 2.5 years	12	-	70%	12	9	-
Class 2	Less than 2.5 years	-	-	70%	-	-	-
	Greater than or equal to 2.5 years	14	-	90%	14	12	-
Class 3	Less than 2.5 years	-	-	115%	-	-	-
	Greater than or equal to 2.5 years	-	-	115%	-	-	-
Class 4	Less than 2.5 years	-	-	250%	-	-	-
	Greater than or equal to 2.5 years	-	-	250%	-	-	-
Class 5	Less than 2.5 years	-	-	0%	-	-	-
	Greater than or equal to 2.5 years	-	-	0%	-	-	-
TOTAL	**LESS THAN 2.5 YEARS**	**-**	**-**		**-**	**-**	**-**
	GREATER THAN OR EQUAL TO 2.5 YEARS	**26**	**-**		**26**	**21**	**-**

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CR10.2	12/31/2022						
Specialized financing: Income-producing real estate and high volatility commercial real estate (Slotting approach)							
		On-balance sheet exposures	Off-balance sheet exposures	Risk weight	Exposure value	Weighted-exposure amount	Expected loss amount
Regulatory categories *in millions of euros*	**Residual maturity**	a	b	c	d	e	f
Class 1	Less than 2.5 years	17	-	50%	17	8	-
	Greater than or equal to 2.5 years	39	9	70%	48	34	-
Class 2	Less than 2.5 years	-	-	70%	-	-	-
	Greater than or equal to 2.5 years	-	-	90%	-	-	-
Class 3	Less than 2.5 years	-	-	115%	-	-	-
	Greater than or equal to 2.5 years	-	-	115%	-	-	-
Class 4	Less than 2.5 years	-	-	250%	-	-	-
	Greater than or equal to 2.5 years	-	-	250%	-	-	-
Class 5	Less than 2.5 years	-	-	0%	-	-	-
	Greater than or equal to 2.5 years	-	-	0%	-	-	-
TOTAL	**LESS THAN 2.5 YEARS**	**17**	**-**		**17**	**8**	**-**
	GREATER THAN OR EQUAL TO 2.5 YEARS	**39**	**9**		**48**	**34**	**-**

CR10.2	12/31/2021						
Specialized financing: Income-producing real estate and high volatility commercial real estate (Slotting approach)							
		On-balance sheet exposures	Off-balance sheet exposures	Risk weight	Exposure value	Weighted-exposure amount	Expected loss amount
Regulatory categories *in millions of euros*	**Residual maturity**	a	b	c	d	e	f
Class 1	Less than 2.5 years	1	-	50%	1	1	-
	Greater than or equal to 2.5 years	15	-	70%	15	11	-
Class 2	Less than 2.5 years	-	-	70%	-	-	-
	Greater than or equal to 2.5 years	8	-	90%	8	7	-
Class 3	Less than 2.5 years	-	-	115%	-	-	-
	Greater than or equal to 2.5 years	-	-	115%	-	-	-
Class 4	Less than 2.5 years	-	-	250%	-	-	-
	Greater than or equal to 2.5 years	-	-	250%	-	-	-
Class 5	Less than 2.5 years	-	-	0%	-	-	-
	Greater than or equal to 2.5 years	-	-	0%	-	-	-
TOTAL	**LESS THAN 2.5 YEARS**	**1**	**-**		**1**	**1**	**-**
	GREATER THAN OR EQUAL TO 2.5 YEARS	**23**	**-**		**23**	**18**	**-**

CR10.5	12/31/2022					
	Equity exposures under the simple risk-weighted approach					
Categories *in millions of euros*	On-balance sheet exposures	Off-balance sheet exposures	Risk weight	Exposure value	Weighted-exposure amount	Expected loss amounts
	a	b	c	d	e	f
Private equity exposures	3,099	176	190%	3,275	6,222	26
Exchange-traded equity exposures	1,415	-	290%	1,415	4,103	11
Other equity exposures	6,291	-	370%	6,291	23,277	151
TOTAL	**10,805**	**176**		**10,981**	**33,602**	**189**

CR10.5	12/31/2021					
Equity exposures under the simple risk-weighted approach						
Categories *in millions of euros*	On-balance sheet exposures	Off-balance sheet exposures	Risk weight	Exposure value	Weighted-exposure amount	Risk-Weighted Assets
	a	b	c	d	e	f
Private equity exposures	3,106	167	190%	3,273	6,219	26
Exchange-traded equity exposures	1,751	-	290%	1,751	5,078	14
Other equity exposures	6,777	-	370%	6,777	25,074	163
TOTAL	**11,634**	**167**		**11,801**	**36,372**	**203**

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6

COUNTERPARTY RISK

6.1 Counterparty risk management

Counterparty risk is the credit risk generated on market, investment and/or settlement transactions. It is the risk of the counterparty not being able to meet its obligations to Group institutions.

It is also related to the cost of replacing a derivative instrument if the counterparty defaults, and is similar to market risk given default.

Counterparty risk also arises on cash management and market activities conducted with customers, and on clearing activities *via* a clearing house or external clearing agent.

Exposure to counterparty risk is measured using the internal ratings-based approach and standardized approach.

Measuring counterparty risk

In economic terms, Groupe BPCE and its subsidiaries measure counterparty risk for derivative instruments (swaps or structured products, for instance) using the internal model method for the Global Financial Services (GFS) scope, or the mark-to-market method for the other institutions. In order to perfect the economic measurement of the current and potential risk inherent in derivatives, a tracking mechanism based on a standardized economic measurement is currently being instituted throughout Groupe BPCE.

GFS uses an internal model to measure and manage its own counterparty risk. Using Monte Carlo simulations for the main risk factors, this model measures the positions on each counterparty and for the entire lifespan of the exposure, taking netting and collateralization criteria into account.

The model thus determines the Expected Positive Exposure (EPE) profile and the Potential Future Exposure (PFE) profile, the latter being the main indicator used by GFS for assessing counterparty risk exposure. This indicator is calculated as the 97.7% percentile of the distribution of exposures for each counterparty.

Since 2021, the counterparty risk assessment model developed by GFS (PFE) has been deployed on the Group’s exposures beyond GFS. In particular, 2022 made the assessment more reliable. The Group’s entities, excluding GFS, continue to use the standard model for assessing the capital requirements for counterparty risk.

Counterparty risk mitigation techniques

Group ceilings and limits regulate counterparty risk. These are validated by the Group Credit and Counterparty Committee.

Use of clearing houses and forward financial instruments (daily margin calls under ISDA agreements, for example) govern relations with the main customers (mainly GFS/Natixis). Accordingly, the Group has implemented the EMIR requirements.

The principles of counterparty risk management are based on:	• a risk measurement determined according to the type of instrument in question, the term of the transactions, and whether or not any netting and collateralization agreements are in place; • counterparty risk limits and allocation procedures; • a value adjustment in respect of counterparty risk: the CVA (Credit Value Adjustment) represents the market value of a counterparty’s default risk (see CVA section below); • incorporation of wrong-way risk: wrong-way risk refers to the risk that a given counterparty exposure is heavily correlated with the counterparty’s probability of default.
From a regulatory standpoint, counterparty risk is represented by:	• specific wrong-way risk, *i.e.* the risk generated when, due to the nature of the transactions entered into with a counterparty, there is a direct link between its credit quality and the amount of the exposure; • general wrong-way risk, *i.e.* the risk generated when there is a correlation between the counterparty’s credit quality and general market factors.

GFS complies with Article 291.6 of the European regulation of June 26, 2013, including the obligation to report wrong-way risk (WWR), which specifies that the bank must have policies, processes and procedures in place to identify and monitor WWR. The goal is to enable the bank to better understand the exposure to counterparty credit risk and thus improve the management of such exposure.

Specific wrong-way risk is subject to a specific capital requirement (Article 291.5 of the European regulation of June 26, 2013 on prudential requirements for credit institutions and investment firms), while general wrong-way risk is assessed using the WWR stress scenarios defined for each asset class.

In the event the Bank's external credit rating is downgraded, it may be required to provide additional cash or collateral to investors under agreements that include rating triggers. In particular, in calculating the liquidity coverage ratio (LCR), the amounts of these additional cash outflows and additional collateral requirements are measured. These amounts comprise the payment the bank would have to make within 30 calendar days in the event its credit rating were downgraded by as much as three notches.

CVA

The valuation of financial instruments traded over-the-counter by Groupe BPCE with external counterparties in its capital markets businesses (mainly GFS) and ALM activities include credit valuation adjustments. The CVA is an adjustment to the valuation of the trading book aimed at factoring in counterparty credit risks. It thus reflects the expectation of loss in fair value terms on the existing exposure to a counterparty due to the potential positive value of the contract, the counterparty's probability of default and the estimated collection rate.

The level of the CVA varies according to changes in exposure to existing counterparty risk and in the counterparty's credit rating, which may trigger changes in the CDS spread used to determine the probability of default.

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6.2 Quantitative disclosures

BPCE18 – BREAKDOWN OF GROSS COUNTERPARTY RISK EXPOSURES BY ASSET CLASS (EXCLUDING OTHER ASSETS) AND METHOD

	12/31/2022							12/31/2021		
	Standard			IRB			Total	Total		
in millions of euros	Exposure	EAD	RWA	Exposure	EAD	RWA	Exposure	Exposure	EAD	RWA
Central banks and other sovereign exposures	-	-	-	2,336	2,336	128	2,336	2,713	2,713	96
Central administrations	11	11	-	10,317	10,317	125	10,328	6,641	6,641	154
Public sector and similar entities	539	539	30	366	366	-	904	1,403	1,403	229
Institutions	13,534	13,509	906	19,094	19,104	6,128	32,628	32,592	35,235	6,746
Corporate customers	564	564	436	18,382	18,380	5,945	18,946	19,116	19,085	6,697
Retail	1	1	0	3	3	1	4	15	17	12
Equities	-	-	-	-	-	-	-	-	-	-
Securitization	45	45	7	1,130	1,130	222	1,175	1,291	1,291	298
TOTAL	**14,692**	**14,668**	**1,379**	**51,628**	**51,636**	**12,550**	**66,321**	**63,771**	**66,384**	**14,232**

BPCE19 – BREAKDOWN BY EXPOSURE CLASS OF RISK-WEIGHTED ASSETS FOR THE CREDIT VALUATION ADJUSTMENT (CVA)

in millions of euros	12/31/2022	12/31/2021
Central banks and other sovereign exposures	-	0
Central administrations	2	2
Public sector and similar entities	-	-
Institutions	2,326	1,993
Corporate customers	583	541
Retail	-	-
Equities	-	-
Securitization	-	-
Other assets	-	-
TOTAL	**2,911**	**2,536**

BPCE20 – SECURITIES EXPOSED TO COUNTERPARTY RISK ON DERIVATIVE TRANSACTIONS AND REPURCHASE AGREEMENTS

	12/31/2022			12/31/2021		
in millions of euros	Standard	IRB	Total	Standard	IRB	Total
Derivatives						
Central banks and other sovereign exposures	-	492	492	-	260	260
Central administrations	11	6,668	6,678	10	2,340	2,350
Public sector and similar entities	535	366	901	1,191	209	1,400
Institutions	10,779	10,584	21,363	10,552	8,498	19,049
Corporate customers	416	9,450	9,866	762	9,275	10,037
Retail	1	3	4	13	3	15
Securitization	45	1,130	1,175	34	1,257	1,291
TOTAL	**11,787**	**28,692**	**40,480**	**12,561**	**21,841**	**34,403**
Repurchase agreements						
Central banks and other sovereign exposures	-	1,844	1,844	-	2,454	2,454
Central administrations	-	3,649	3,649	-	4,290	4,290
Public sector and similar entities	3	-	3	2	-	2
Institutions	2,755	8,510	11,265	4,124	9,419	13,543
Corporate customers	147	8,933	9,080	144	8,935	9,079
Retail	-	0	0	-	0	0
Securitization	-	-	-	-	-	-
TOTAL	**2,905**	**22,936**	**25,841**	**4,270**	**25,098**	**29,369**

6.3 Detailed quantitative disclosures

The detailed quantitative disclosures on counterparty risk in the following tables enhances the information in the previous section, in respect of Pillar III.

EU CCR1 – ANALYSIS OF COUNTERPARTY RISK EXPOSURE BY APPROACH

		12/31/2022							
		a	b	c	d	e	f	g	h
in millions of euros		Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post-CRM	Exposure value	Risk-Weighted Assets
EU-1	EU – Original exposure method (for derivatives)	-	-		1.4	-	-	-	-
EU-2	EU – Simplified SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
1	SA-CCR (for derivatives)	1,326	3,922		1.4	24,785	7,347	7,347	2,616
2	IMM (for derivatives and SFTs)			15,246	1.4	113	21,508	21,508	3,436
2a	of which securities financing transaction netting sets			-		-	-	-	-
2b	of which derivative & long settlement transaction netting sets			15,246		113	21,508	21,508	3,436
2c	of which from contractual cross-product netting sets			-		-	-	-	-
3	Financial collateral simple method (for SFTs)					-	-	-	-
4	Financial collateral comprehensive method (for SFTs)					21,626	21,626	21,626	1,887
5	VaR for SFTs					-	-	-	-
6	**TOTAL**					**46,524**	**50,481**	**50,481**	**7,938**

in millions of euros		Replacement cost (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post-CRM	Exposure value	Risk-Weighted Assets
		12/31/2021							
EU-1	EU – Original exposure method (for derivatives)	-	-		1.4	-	-	-	-
EU-2	EU – Simplified SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
1	SA-CCR (for derivatives)	1,520	3,750		1.4	26,647	8,008	8,008	3,275
2	IMM (for derivatives and SFTs)			10,732	1.4	411	15,025	15,025	4,334
2a	of which securities financing transaction netting sets			-		-	-	-	-
2b	of which derivative & long settlement transaction netting sets			10,732		411	15,025	15,025	4,334
2c	of which from contractual cross-product netting sets			-		-	-	-	-
3	Financial collateral simple method (for SFTs)					-	-	-	-
4	Financial collateral comprehensive method (for SFTs)					31,955	31,473	31,473	2,145
5	VaR for SFTs					-	-	-	-
6	**TOTAL**					**59,012**	**54,507**	**54,507**	**9,754**

EU CCR2 – CAPITAL REQUIREMENT FOR CREDIT VALUATION ADJUSTMENT (CVA)

		12/31/2022	
		a	b
in millions of euros		Exposure value	Risk-Weighted Assets
1	Total transactions subject to the advanced method	8,241	1,381
2	• VaR component (including the 3× multiplier)		120
3	• Stressed VaR component (including the 3× multiplier)		1,261
4	Transactions subject to the standardized method	5,238	1,530
EU-4	Transactions subject to the alternative approach (based on the original exposure method)		
5	**TOTAL TRANSACTIONS SUBJECT TO OWN FUNDS REQUIREMENTS FOR CVA RISK**	**13,479**	**2,911**

		12/31/2021	
		a	b
in millions of euros		Exposure value	Risk-Weighted Assets
1	Total transactions subject to the advanced method	5,425	1,187
2	• VaR component (including the 3× multiplier)		65
3	• Stressed VaR component (including the 3× multiplier)		1,122
4	Transactions subject to the standardized method	5,204	1,349
EU-4	Transactions subject to the alternative approach (based on the original exposure method)		
5	**TOTAL TRANSACTIONS SUBJECT TO OWN FUNDS REQUIREMENTS FOR CVA RISK**	**10,630**	**2,536**

EU CCR3 – STANDARDIZED APPROACH – COUNTERPARTY RISK EXPOSURES BY REGULATORY EXPOSURE CATEGORY AND RISK WEIGHTING

		12/31/2022											
		Risk weight											
		a	b	c	d	e	f	g	h	i	j	k	l
	Exposure classes *in millions of euros*	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total exposure value
1	Central governments or central banks												
2	Regional governments or local authorities	11				98							109
3	Public sector entities	429				44	1			9			482
4	Multilateral development banks												
5	International organizations	11											11
6	Institutions	87	12,476			368	291			3			13,224
7	Corporate customers	194				23	150			313	19		699
8	Retail								1				1
9	Institutions and corporates with a short-term credit assessment					23	40			34			97
10	Other items										25		25
11	**TOTAL EXPOSURE VALUE**	**732**	**12,476**			**555**	**481**		**1**	**358**	**44**		**14,648**

		12/31/2021											
		Risk weight											
		a	b	c	d	e	f	g	h	i	j	k	l
	Exposure classes *in millions of euros*	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total exposure value
1	Central governments or central banks												
2	Regional governments or local authorities	10				407							418
3	Public sector entities	475				381	6			55			918
4	Multilateral development banks												
5	International organizations	10											10
6	Institutions	2,854	13,375			351	253						16,834
7	Corporate customers					107	161			668	119		1,055
8	Retail								14				14
9	Institutions and corporates with a short-term credit assessment					82	57			10			149
10	Other items									66	25		91
11	**TOTAL EXPOSURE VALUE**	**3,349**	**13,375**			**1,329**	**478**		**14**	**799**	**145**		**19,489**

EU CCR4 – IRB APPROACH – COUNTERPARTY RISK EXPOSURES BY EXPOSURE CLASS AND PD SCALE

			12/31/2022						
			a	b	c	d	e	f	g
A-IRB *in millions of euros*		PD range	Exposure value	Weighted average PD *(in %)*	Number of obligors	Weighted average LGD *(in %)*	Weighted average maturity *(in years)*	Risk-Weighted Assets	RWA density
1	CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	12,254	0.00%	108	11.38%	-	35	0.29%
2		0.15 to < 0.25	827	0.21%	5	37.10%	-	160	19.36%
3		0.25 to < 0.50	46	0.38%	3	47.10%	-	20	42.88%
4		0.50 to < 0.75	-	0.00%	-	0.00%	-	-	0.00%
5		0.75 to < 2.50	-	0.00%	-	0.00%	-	-	0.00%
6		2.50 to < 10.00	27	3.19%	1	47.10%	-	37	135.45%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**13,154**	**0.02%**	**117**	**13.20%**	**-**	**252**	**1.91%**
1	INSTITUTIONS	0.00 to < 0.15	14,738	0.00%	-	33.46%	-	2,202	14.94%
2		0.15 to < 0.25	1,793	0.00%	-	33.37%	-	876	48.87%
3		0.25 to < 0.50	637	0.00%	-	34.25%	-	459	72.15%
4		0.50 to < 0.75	261	0.00%	-	40.59%	-	203	77.68%
5		0.75 to < 2.50	80	0.00%	-	60.03%	-	106	132.20%
6		2.50 to < 10.00	13	0.00%	-	54.26%	-	32	254.70%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**17,521**	**0.00%**	**1**	**33.72%**	**-**	**3,878**	**22.13%**
1	CORPORATE CUSTOMERS	0.00 to < 0.15	11,356	0.04%	674	29.95%	-	1,236	10.89%
2		0.15 to < 0.25	1,614	0.14%	205	28.50%	-	591	36.61%
3		0.25 to < 0.50	813	0.29%	229	31.44%	-	325	39.99%
4		0.50 to < 0.75	779	0.49%	406	32.84%	-	420	53.89%
5		0.75 to < 2.50	2,141	1.01%	806	27.86%	-	1,455	67.98%
6		2.50 to < 10.00	841	3.42%	689	26.88%	-	908	108.00%
7		10.00 to < 100.00	18	8.92%	237	28.94%	-	32	178.70%
8		100.00 (default)	1	99.25%	42	73.15%	-	2	145.52%
	Sub-total		**17,564**	**0.38%**	**3,288**	**29.61%**	**-**	**4,969**	**28.29%**
1	RETAIL	0.00 to < 0.15	1	0.09%	49	45.00%	-	-	10.90%
2		0.15 to < 0.25	-	0.00%	-	0.00%	-	-	0.00%
3		0.25 to < 0.50	1	0.34%	54	45.00%	-	-	26.95%
4		0.50 to < 0.75	-	0.67%	22	45.00%	-	-	40.13%
5		0.75 to < 2.50	1	1.74%	59	45.00%	-	1	58.19%
6		2.50 to < 10.00	-	4.99%	19	45.00%	-	-	70.17%
7		10.00 to < 100.00	-	15.23%	16	45.00%	-	-	93.48%
8		100.00 (default)	-	100.00%	2	45.00%	-	-	0.00%
	Sub-total		**3**	**2.81%**	**221**	**45.00%**	**-**	**1**	**45.22%**
	TOTAL		**48,241**		**3,627**			**9,100**	

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A-IRB *in millions of euros*		PD range	a Exposure value	b Weighted average PD *(in %)*	c Number of obligors	d Weighted average LGD *(in %)*	e Weighted average maturity *(in years)*	f Risk-Weighted Assets	g RWA density
			12/31/2021						
1	CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	8,850	0.00%	91	15.41%	-	23	0.26%
2		0.15 to < 0.25	840	0.21%	7	33.20%	-	145	17.24%
3		0.25 to < 0.50	98	0.10%	3	17.57%	-	24	24.58%
4		0.50 to < 0.75	-	0.00%	-	0.00%	-	-	0.00%
5		0.75 to < 2.50	-	0.00%	-	0.00%	-	-	0.00%
6		2.50 to < 10.00	38	3.19%	1	47.10%	-	56	149.08%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**9,826**	**0.03%**	**102**	**17.08%**	**-**	**248**	**2.53%**
1	INSTITUTIONS	0.00 to < 0.15	13,644	0.00%	-	38.91%	-	2,552	18.70%
2		0.15 to < 0.25	1,296	0.00%	-	44.72%	-	624	48.13%
3		0.25 to < 0.50	438	0.00%	-	47.83%	-	321	73.31%
4		0.50 to < 0.75	89	0.00%	-	44.87%	-	85	95.65%
5		0.75 to < 2.50	131	0.00%	-	57.44%	-	179	136.69%
6		2.50 to < 10.00	9	0.00%	-	66.55%	-	21	229.48%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**15,608**	**0.00%**	**1**	**39.85%**	**-**	**3,782**	**24.23%**
1	CORPORATE CUSTOMERS	0.00 to < 0.15	10,890	0.04%	736	32.55%	-	1,058	9.71%
2		0.15 to < 0.25	1,255	0.16%	190	30.23%	-	363	28.97%
3		0.25 to < 0.50	1,108	0.29%	233	28.33%	-	392	35.35%
4		0.50 to < 0.75	1,061	0.51%	436	24.88%	-	409	38.52%
5		0.75 to < 2.50	2,500	1.34%	622	31.79%	-	1,695	67.80%
6		2.50 to < 10.00	746	4.11%	508	33.16%	-	838	112.43%
7		10.00 to < 100.00	66	8.72%	280	23.29%	-	124	187.57%
8		100.00 (default)	54	87.98%	57	35.16%	-	59	108.65%
	Sub-total		**17,678**	**0.75%**	**3,062**	**31.55%**	**-**	**4,937**	**27.93%**
1	RETAIL	0.00 to < 0.15	-	0.11%	21	45.00%	-	-	12.20%
2		0.15 to < 0.25	-	0.24%	1	45.00%	-	-	21.43%
3		0.25 to < 0.50	1	0.34%	56	45.00%	-	-	26.85%
4		0.50 to < 0.75	-	0.66%	12	45.00%	-	-	39.94%
5		0.75 to < 2.50	1	1.93%	58	45.00%	-	-	59.56%
6		2.50 to < 10.00	-	5.37%	24	45.00%	-	-	70.87%
7		10.00 to < 100.00	1	15.16%	13	45.00%	-	1	94.29%
8		100.00 (default)	-	100.00%	2	45.00%	-	-	0.00%
	Sub-total		**3**	**4.60%**	**187**	**45.00%**	**-**	**2**	**55.23%**
	TOTAL		**43,115**		**3,352**			**8,969**	

F-IRB *in millions of euros*		**PD range**	**Exposure value**	**Weighted average PD** *(in %)*	**Number of obligors**	**Weighted average LGD** *(in %)*	**Weighted average maturity** *(in years)*	**Risk-Weighted Assets**	**RWA density**
		12/31/2022							
			a	**b**	**c**	**d**	**e**	**f**	**g**
1	CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	45	0.00%	-	45.00%	-	-	0.00%
2		0.15 to < 0.25	-	0.00%	-	0.00%	-	-	19.36%
3		0.25 to < 0.50	-	0.39%	-	45.00%	-	-	42.88%
4		0.50 to < 0.75	-	0.00%	-	0.00%	-	-	0.00%
5		0.75 to < 2.50	-	0.00%	-	0.00%	-	-	0.00%
6		2.50 to < 10.00	-	0.00%	-	0.00%	-	-	135.45%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**45**	**0.00%**	**-**	**45.00%**	**-**	**-**	**1.91%**
1	INSTITUTIONS	0.00 to < 0.15	1,758	0.06%	-	40.94%	-	369	20.99%
2		0.15 to < 0.25	156	0.17%	-	0.00%	-	51	32.88%
3		0.25 to < 0.50	13	0.36%	-	45.00%	-	6	42.76%
4		0.50 to < 0.75	-	0.60%	-	0.00%	-	-	104.19%
5		0.75 to < 2.50	1	1.77%	-	15.58%	-	1	136.26%
6		2.50 to < 10.00	1	3.02%	-	45.00%	-	2	148.69%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**1,929**	**0.07%**	**-**	**37.66%**	**-**	**429**	**22.24%**
1	CORPORATE CUSTOMERS	0.00 to < 0.15	1,012	0.02%	-	22.27%	-	184	18.19%
2		0.15 to < 0.25	75	0.16%	-	45.00%	-	24	31.44%
3		0.25 to < 0.50	18	0.35%	-	45.00%	-	12	65.67%
4		0.50 to < 0.75	17	0.60%	-	45.00%	-	13	72.57%
5		0.75 to < 2.50	90	1.35%	-	45.00%	-	79	88.48%
6		2.50 to < 10.00	46	4.45%	-	45.00%	-	63	137.32%
7		10.00 to < 100.00	41	11.95%	-	45.00%	-	90	219.75%
8		100.00 (default)	1	100.00%	-	45.00%	-	-	0.00%
	Sub-total		**1,301**	**0.74%**	**1**	**27.31%**	**-**	**465**	**35.74%**
	TOTAL		**3,275**		**1**			**894**	

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			12/31/2021						
			a	b	c	d	e	f	g
F-IRB *in millions of euros*		**PD range**	**Exposure value**	**Weighted average PD** *(in %)*	**Number of obligors**	**Weighted average LGD** *(in %)*	**Weighted average maturity** *(in years)*	**Risk-Weighted Assets**	**RWA density**
1	CENTRAL GOVERNMENTS AND CENTRAL BANKS	0.00 to < 0.15	1	0.00%	-	45.00%	-	-	0.00%
2		0.15 to < 0.25	-	0.00%	-	0.00%	-	-	17.24%
3		0.25 to < 0.50	-	0.00%	-	0.00%	-	-	24.58%
4		0.50 to < 0.75	-	0.00%	-	0.00%	-	-	0.00%
5		0.75 to < 2.50	-	0.00%	-	0.00%	-	-	0.00%
6		2.50 to < 10.00	-	0.00%	-	0.00%	-	-	149.08%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	0.00%	-	0.00%	-	-	0.00%
	Sub-total		**1**	**0.00%**	**-**	**45.00%**	**-**	**-**	**2.53%**
1	INSTITUTIONS	0.00 to < 0.15	1,572	0.40%	-	33.11%	-	492	31.27%
2		0.15 to < 0.25	630	0.16%	-	0.61%	-	25	4.00%
3		0.25 to < 0.50	296	0.35%	-	0.00%	-	32	10.82%
4		0.50 to < 0.75	-	0.60%	-	0.00%	-	-	104.19%
5		0.75 to < 2.50	-	2.00%	-	0.00%	-	-	151.30%
6		2.50 to < 10.00	2	2.91%	-	45.00%	-	2	123.20%
7		10.00 to < 100.00	-	0.00%	-	0.00%	-	-	0.00%
8		100.00 (default)	-	100.00%	-	45.00%	-	-	0.00%
	Sub-total		**2,500**	**0.34%**	**-**	**21.01%**	**-**	**551**	**22.05%**
1	CORPORATE CUSTOMERS	0.00 to < 0.15	278	0.27%	-	29.04%	-	181	65.26%
2		0.15 to < 0.25	763	0.16%	-	44.99%	-	24	3.12%
3		0.25 to < 0.50	27	0.32%	-	45.00%	-	15	56.05%
4		0.50 to < 0.75	19	0.59%	-	42.39%	-	14	72.72%
5		0.75 to < 2.50	55	1.50%	-	41.65%	-	53	96.00%
6		2.50 to < 10.00	42	3.75%	-	45.00%	-	57	136.13%
7		10.00 to < 100.00	20	13.29%	-	45.00%	-	43	216.66%
8		100.00 (default)	6	100.00%	-	45.00%	-	-	0.00%
	Sub-total		**1,209**	**1.08%**	**1**	**41.13%**	**-**	**387**	**32.02%**
	TOTAL		**3,710**		**1**			**938**	

EU CCR5 – COMPOSITION OF COLLATERAL FOR COUNTERPARTY RISK EXPOSURES

		12/31/2022							
		a	b	c	d	e	f	g	h
		Collateral used in derivative transactions				Collateral used in SFTs			
		Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
Collateral type *in millions of euros*		Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
1	Cash – domestic currency	-	7,956	-	13,692	-	1,898	-	1,424
2	Cash – other currencies	-	1,440	-	2,824	-	5,356	-	1,201
3	Domestic sovereign debt	-	11	-	-	-	55	-	-
4	Other sovereign debt	1,845	374	-	106	-	79,654	-	85,326
5	Government agency debt	229	463	-	63	-	12,841	-	14,558
6	Corporate bonds	1,533	178	-	181	-	17,987	-	18,934
7	Equities	109	-	-	-	-	14,758	-	54,379
8	Other collateral	12	79	-	-	-	12,642	-	12,626
9	**TOTAL**	**3,728**	**10,501**	**-**	**16,866**	**-**	**145,192**	**-**	**188,448**

		12/31/2021							
		a	b	c	d	e	f	g	h
		Collateral used in derivative transactions				Collateral used in SFTs			
		Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
Collateral type *in millions of euros*		Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
1	Cash – domestic currency	-	8,617	612	10,779	-	1,237	-	1,490
2	Cash – other currencies	-	1,520	-	1,713	-	6,039	-	1,596
3	Domestic sovereign debt	-	21	-	-	-	1	-	27
4	Other sovereign debt	1,904	175	-	78	-	93,670	-	102,881
5	Government agency debt	684	484	-	575	-	9,566	-	32,036
6	Corporate bonds	942	165	-	229	-	11,424	-	12,241
7	Equities	670	-	-	-	-	16,428	-	62,305
8	Other collateral	10	80	-	-	-	12,048	-	9,401
9	**TOTAL**	**4,210**	**11,062**	**612**	**13,373**	**-**	**150,412**	**-**	**221,977**

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EU CCR6 – CREDIT DERIVATIVE EXPOSURES

		12/31/2022	
		a	b
in millions of euros		Protection purchased	Protection sold
	Notional amounts		
1	Single-name credit default swaps	16,437	17,944
2	Index credit default swaps	21,243	19,240
3	TRS	1,432	-
4	Credit options	-	-
5	Other credit derivatives	-	-
6	**TOTAL NOTIONAL AMOUNTS**	**39,111**	**37,184**
	Fair value		
7	Positive fair value (asset)	392	491
8	Negative fair value (liability)	(486)	(183)

		12/31/2021	
		a	b
in millions of euros		Protection purchased	Protection sold
	Notional amounts		
1	Single-name credit default swaps	6,356	10,397
2	Index credit default swaps	9,220	5,222
3	TRS	951	-
4	Credit options	-	-
5	Other credit derivatives	-	-
6	**TOTAL NOTIONAL AMOUNTS**	**16,527**	**15,619**
	Fair value		
7	Positive fair value (asset)	84	393
8	Negative fair value (liability)	(441)	(63)

EU CCR7 – RISK-WEIGHTED ASSET FLOW STATEMENTS FOR COUNTERPARTY RISK EXPOSURES UNDER THE IMM

		Risk-Weighted Assets
in millions of euros		a
1	**12/31/2021**	**4,357**
2	Asset size	555
3	Credit quality of counterparties	(131)
4	Model updates (IMM only)	-
5	Methodology and policy (IMM only)	(84)
6	Acquisitions and disposals	-
7	Foreign exchange movements	-
8	Others	(1,237)
9	**12/31/2022**	**3,459**

CCR8 – EXPOSURE TO CENTRAL COUNTERPARTIES (CCP)

		12/31/2022	
		a	b
in millions of euros		Exposure value	Risk-Weighted Assets
1	**Exposures to QCCPs (total)**		**404**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	7,254	145
3	i) OTC derivatives	4,799	96
4	ii) Exchange-traded derivatives	-	-
5	iii) Securities financing transaction (SFT)	2,456	49
6	iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	-	
8	Non-segregated initial margin	256	5
9	Prefunded default fund contributions	630	254
10	Unfunded default fund contributions	-	-
11	**Exposures to non-QCCPs (total)**		**-**
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-
13	i) OTC derivatives	-	-
14	ii) Exchange-traded derivatives	-	-
15	iii) Securities financing transaction (SFT)	-	-
16	iv) Netting sets where cross-product netting has been approved	-	-
17	Segregated initial margin	-	
18	Non-segregated initial margin	-	-
19	Prefunded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

		12/31/2021	
		a	b
in millions of euros		Exposure value	Risk-Weighted Assets
1	**Exposures to QCCPs (total)**		**328**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	8,386	168
3	i) OTC derivatives	4,707	94
4	ii) Exchange-traded derivatives	-	-
5	iii) Securities financing transaction (SFT)	3,678	74
6	iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	-	
8	Non-segregated initial margin	93	2
9	Prefunded default fund contributions	406	158
10	**Unfunded default fund contributions**	**-**	**-**
11	Exposures to non-QCCPs (total)		-
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-
13	i) OTC derivatives	-	-
14	ii) Exchange-traded derivatives	-	-
15	iii) Securities financing transaction (SFT)	-	-
16	iv) Netting sets where cross-product netting has been approved	-	-
17	Segregated initial margin	-	
18	Non-segregated initial margin	-	-
19	Prefunded default fund contributions	-	-
20	Unfunded default fund contributions	-	-

BPCE 21 – NOTIONAL AMOUNT OF DERIVATIVES

in millions of euros	12/31/2022	12/31/2021
TOTAL NOTIONAL AMOUNT OF OUTSTANDING DERIVATIVES	**10,790,462**	**9,134,065**
• of which notional amount of derivatives traded with central counterparties	8,649,103	7,182,595
Notional amount of OTC derivatives	**2,141,359**	**1,951,469**
• of which interest rate derivatives	920,510	825,999
• of which equity derivatives	89,551	110,954
• of which currency derivatives	1,095,126	984,457
• of which credit derivatives	16,453	10,102
Notional amount of cleared derivatives	**8,649,103**	**7,182,595**
• of which interest rate derivatives	8,447,973	7,005,701
• of which equity derivatives	147,124	132,697
• of which currency derivatives	29,858	31,103
• of which credit derivatives	20,442	8,786

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SECURITIZATION TRANSACTIONS

7.1 Regulatory framework and accounting methods

Regulatory framework

Two European regulations aimed at facilitating the development of the securitization market, preventing risks and ensuring the stability of the financial system, were published in the Official Journal of the European Union on December 28, 2017. The objective of both regulations is to govern securitization transactions in the European Union.

REGULATION (EU) NO. 2017/2402 (1)

Sets a general framework for securitization (the previous rules were spread out in three different directives and two regulations). Establishes appropriate due diligence, risk retention and transparency requirements for parties to securitization transactions, sets loan approval criteria, lays down requirements for selling securitizations to retail clients, and prohibits re-securitization.

Also establishes a specific framework for STS (simple, transparent and standardized) securitization, by defining the criteria for transactions to meet in order to qualify as securitizations and the obligations arising from such qualification, such as the obligation to notify ESMA of securitization programs.

REGULATION (EU) NO. 2017/2401 (2)

Amends the provisions of regulation (EU) No. 575/2013 pertaining to securitization, including in particular the prudential requirements applicable to credit institutions and investment firms acting as originators, sponsors or investors in securitization transactions. Deals in particular with:

- STS securitizations, and the method for calculating the associated risk-weighted exposure amounts;
- the hierarchy of methods for calculating RWAs and determining the related parameters;
- external credit assessments (performed by external rating agencies).

REGULATORY CAPITAL REQUIREMENTS

Hierarchy of methods: securitization capital requirements are calculated in accordance with a hierarchy of methods applied in the order of priority set by the European Commission:

- SEC-IRBA (Securitization Internal Ratings Based Approach): uses the bank's internal rating models, which shall have been approved beforehand by the supervisor. SEC-IRBA calculates regulatory capital requirements in relation to underlying exposures as if these had not been securitized, and then applies certain pre-defined inputs;
- SEC-SA (Securitization Standardized Approach): this method is the last chance to use a formula defined by the supervisor, using as an input the capital requirements that would be calculated under the current Standardized Approach (calculates regulatory capital requirements in relation to underlying exposures – based on their class – and then applies the ratio of defaulted underlying exposures to the total amount of underlying exposures);
- SEC-ERBA (Securitization External Ratings Based Approach): based on the credit ratings of securitization tranches determined by external rating agencies.

If none of these three methods is applicable (SEC-IRBA, SEC-ERBA, SEC-SA), then the risk weight applied to the securitization is 1,250%.

Details:

- introduction of new risk inputs: maturity and thickness of the tranche;
- higher risk weight floor: 15% (*versus* 7% previously);
- preferential regulatory treatment for STS securitization exposures;
- risk weight floor lowered to 10% (*versus* 15%);
- SEC-ERBA: STS differentiated risk weight table.

The European regulation defining the new general framework for securitization and creating a clear set of criteria for Simple, Transparent and Standardized (STS) securitizations, as well as the related amendments to the CRR, were published in the Official Journal of the European Union on December 28, 2017, with an effective date of January 2019.

Accounting methods

Securitization transactions in which Groupe BPCE is an investor (*i.e.* the Group invests directly in some securitization positions, provides liquidity, and is a counterparty for derivatives exposures or guarantees) are recognized in accordance with the Group's accounting principles, as referred to in the notes to the consolidated financial statements.

Securitization positions are predominantly recorded under "Securities at amortized cost" and "Financial assets at fair value through other comprehensive income."

Securitization positions classified as "Securities at amortized cost" are measured after their initial recognition at amortized cost based on the effective interest rate. Any position booked to "Securities at amortized cost" is impaired under "Cost of credit risk" in respect of Stage 1 or Stage 2 expected credit losses following a significant increase in credit risk.

Where a position booked to "Securities at amortized cost" is transferred to Stage 3 (defaulted exposures), the impairment is recorded under "Cost of credit risk" (Note 7.1.2 to the financial statements – "Change in gross carrying amounts and expected credit losses on financial assets and commitments").

In the event of disposal, the Group recognizes the gains or losses on disposal in the income statement under "Net gains or losses arising from the derecognition of financial assets at amortized cost". Except in the case where the receivable is in default: in the latter case, it is recognized under "Cost of credit risk".

Securitization positions classified as "Financial assets at fair value through other comprehensive income" are remeasured at their fair value at the closing date.

Interest income accrued or received on debt instruments is recognized in income based on the effective interest rate under "Interest and similar income" in net banking income (NBI), while changes in fair value (excluding revenues) are recorded on a separate line in other comprehensive income under "Gains and losses recognized directly in other comprehensive income." They are impaired in respect of Stage 1, 2 or 3 expected credit losses, in accordance with the same methodology used for positions classified as "Securities at amortized cost." This impairment is recorded on the liabilities side of the balance sheet under other comprehensive income recyclable to profit or loss, with a corresponding entry to "Cost of credit risk" in the income statement (Note 7.1.2 to the financial statements – "Change in gross carrying amounts and expected credit losses on financial assets and commitments").

If the position is sold, the Group recognizes the capital gains or losses on disposal in profit or loss under "Gains (losses) on financial assets measured at fair value through other comprehensive income before tax" unless the position is in Stage 3. In such case, the loss is recognized in "Cost of credit risk."

Securitization positions classified as "Financial assets at fair value through profit or loss" are measured at fair value, at both the initial recognition date and the reporting date. Changes in fair value over the period, interest, and gains or losses on disposals related to securitization positions are recognized in "Gains (losses) on financial instruments at fair value through profit or loss."

Synthetic securitization transactions such as Credit Default Swaps are subject to accounting recognition rules specific to trading derivatives (Note 5.2 to the financial statements – "Financial assets and liabilities at fair value through profit or loss").

In accordance with IFRS 9, securitized assets are derecognized when Groupe BPCE has transferred substantially all of the risks and rewards of ownership of the asset.

If the Group transfers the cash flows of a financial asset but neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, and has not retained control of the financial asset, the Group derecognizes the financial asset and then recognizes separately, if necessary, as assets or liabilities any rights and obligations created or retained in the transfer. If the Group retains control of the financial asset, it continues to recognize the financial asset to the extent of its continuing involvement in the financial asset.

When a financial asset at amortized cost or at fair value through other comprehensive income is fully derecognized, a gain or loss on disposal is recorded in the income statement. The amount is equal to the difference between the carrying amount of the asset and the value of the consideration received, corrected for impairment, and where applicable for any unrealized profit or loss previously recognized directly in other comprehensive income.

Given the relatively low value of the assets in question and relative infrequency of securitization transactions, assets pending securitization continue to be recognized in their original portfolio. Specifically, they continue to be recognized under "Loans and advances to customers at amortized cost" when that is their original classification. For synthetic securitization transactions, assets are not derecognized as long as the institution retains control over them. The assets continue to be recognized in accordance with their original classification and valuation method. Consolidation or non-consolidation of securitization vehicles is analyzed in accordance with IFRS 10 based on the institution's ties with the vehicle. These principles are reiterated in Note 3.2.1 to the financial statements – "Entities controlled by the Group."

Scope of the programs:

- Originator: either an entity which, on its own or through affiliates, was directly or indirectly involved in the original agreement which created the obligations (or contingent obligations) of the obligor, giving rise to the securitization transaction or arrangement; or an entity that purchases a third party's on-balance sheet exposures and then securitizes them;
- Sponsor: an institution other than an originator institution that establishes and manages an asset-backed commercial paper program or other securitization scheme that purchases exposures from third-party entities;
- Investor: the Group's position when it holds securitization positions in which it has invested, but in which it does not act as originator or sponsor. These are mainly tranches acquired in programs initiated or managed by external banks.

Terminology

Traditional securitization: the economic transfer to investors of financial assets such as loans or advances, transforming these loans into financial securities issued on the capital market *via* SSPEs (securitization special purpose entities).

Synthetic securitization: in a synthetic transaction, ownership of the asset is not transferred but the risk is transferred through a financial instrument, *i.e.* the credit derivative.

Re-securitization: a securitization in which the credit risk associated with a portfolio of underlying assets is divided into tranches and for which at least one of the underlying asset exposures is a securitization position.

Tranche: a contractually established segment of the credit risk associated with an exposure or number of exposures.

Securitization position: an exposure to a securitization.

Liquidity facility: the securitization position arising from a contractual agreement to provide funding to ensure timeliness of cash flows to investors.

7.2 Securitization management at Groupe BPCE

Since 2014, Groupe BPCE has had a residential real estate loan securitization program to ensure the sustainability of its stock of collateral eligible for the Eurosystem, providing it with liquidity reserves.

The banking book EAD (final securitization) amounted to €22.48 billion on December 31, 2022 (up by €4.02 billion year-on-year).

The positions were mainly carried by GFS (€17.86 billion), BRED (€2.57 billion) and BPCE SA (€2.04 billion, positions arising from the transfer of a portfolio of home loan and public asset securitizations from Crédit Foncier in September 2014).

The EADs in the trading portfolio amounted to €314 billion at December 31, 2022, and were mainly carried by GFS (€267 billion) and BRED (€46 billion).

The increase in EAD of the banking book is mainly due to:

- the business lines comprising GFS' roll-out plan (+€3.86 billion), and particularly sponsoring (+€2.03 billion), origination (+€0.93 billion) and investment (+€0.90 billion);
- the increase in outstandings on the BRED scope amounting to +€0.49 billion;
- the decrease in exposures on the BPCE SA portfolio managed in run off for -€0.27 billion;
- the workout portfolio exposures of the Corporate & Investment Banking division (formerly GAPC) and BPCE are managed under a run-off method, whereby positions are gradually amortized but still managed (including disposals) in order to safeguard the Group's interests by actively reducing positions under acceptable pricing conditions.

Breakdown of EAD by entity

GFS: €18.1 BILLION EAD SECURITIZATION (BANKING + TRADING BOOK)

The GFS exposure is mainly positioned in the Banking book at €18.1 billion.

The exposure of the banking book carried by GFS as Sponsor is €11.8 billion:

- it consists of 32 lines, mainly transactions carried out through the ABCP Magenta sub-funds (€4.9 billion), and a Versailles liquidity line (€6.8 billion) issued by GFS as a guarantee
- the average WAL (Weighted Average Life) is 1.3 years.;
- RWA are calculated mainly using the SEC-SA approach;
- the portfolio is 100% senior with 11% STS.

The exposure of the banking book carried by GFS as Originator is €3.4 billion, of which 95% in senior and 100% non-STS:

- the exposure comes from 262 lines, mainly synthetic securitizations issued by GFS in the amount of €3.1 billion through the Kibo, Kutang and Lhotse SPVs. These SPVs are subject to Significant Risk Transfer. The average WAL (Weighted Average Life) is 4.9 years;
- traditional Originator securitizations represented €0.3 billion, spread over 249 lines. The main approaches used to calculate RWA are Sec-Irba (€187 million) and Sec-Sa (€89 million).

The exposure of the banking book carried by GFS as investor is €3.0 billion, of which €0.3 billion in the trading book:

- the exposure as an investor is spread over 392 lines on the banking book and 121 lines on the trading book;
- the main approaches used to calculate RWA are SEC-SA (€2.7 billion) and SEC-ERBA (€0.3 billion);
- on the Banking Book, the portfolio is 88% senior, 10% mezzanine, 2% first loss and is totally non-STS;
- for the Trading Book, the portfolio is 85% mezzanine, 15% senior and 92% non-STS. The positions are mainly as an investor, with an average WAL (Weighted Average Life) of 2.6 years.

In general, the RWAs are mainly calculated according to the SEC-SA (€14.2 billion), then SEC-IRBA (€3.3 billion), SEC-ERBA (€0.6 billion) and the default approach (€18 million). In the SEC-ERBA approach, 77% of the exposure comes from lines rated at least A, of which 68% are rated AAA.

BRED: €2.62 BILLION EAD INVESTOR SECURITIZATION (BANKING + TRADING BOOK)

BRED's exposure, as an investor, is essentially positioned in the Banking Book.

Concerning this Banking Book exposure:

- it consists of 219 lines, for an EAD of €2.6 billion, mainly housed in the NJR replacement subsidiary (74% of the volume);
- these lines are of excellent quality; 99.9% of the positions are rated at least A, 88.3% are rated AAA. The portfolio is 99.5% senior with 66.7% STS;
- the average WAL (Weighted Average Life) is 1.46 years.

The Trading Book stands at €46 billion in EAD for 44 lines:

- the quality is also high; the securities are at least A-rated, including 88.2% AAA;
- the portfolio is 100% senior, with 12.9% of STS securities;

- the average WAL is 0.48 years.

There are no synthetic positions or re-securitizations in either portfolio.

The RWAs are calculated using the SEC-ERBA approach.

The portfolios are regularly subjected to baseline and stress scenarios that demonstrate their full resilience.

BPCE SA: €2.0 BILLION EAD INVESTOR SECURITIZATION

BPCE SA's investor exposure is exclusively positioned in the Banking Book.

As a reminder, Crédit Foncier's securitization positions, which boast solid credit quality, were sold to BPCE at balance sheet value, with no impact on the Group's consolidated financial statements (more than 90% of the securitization portfolio was transferred to BPCE on September 25, 2014). These exposures are recognized in loans and advances ("L&A") and did not present a significant risk of loss on completion, as confirmed by the external audit carried out at the time of the transfer.

BPCE SA therefore acts as an Investor (securitization positions in which the Group entity has invested, but in which the Group does not act as originator or sponsor). This includes tranches acquired in programs initiated or managed by third-party banks) and this portfolio is subject to extinctive management. It is composed of:

- 22 securitization positions in European RMBS and US Student Loans;
- with a legal maturity of more than 5 years and an average WAL (Weighted Average Life) of 4.26 years;
- recognized at amortized cost;
- composed only of Senior tranches, non-STS;
- high quality, with 88.8% of the portfolio being Investment Grade;
- no synthetic securitization or re-securitization.

The risk-weighted assets are calculated according to the SEC-ERBA approach.

This portfolio is monitored through quarterly internal stress tests (RWA and losses to completion) and demonstrates the robustness of the portfolio's credit quality.

The various relevant portfolios are specially monitored by the entities and subsidiaries, and by the central institution. Depending on the scope involved, special management or steering committees regularly review the main positions and management strategies.

The central institution's Risk division regularly reviews securitization exposures (quarterly mapping), changes in portfolio structure, risk-weighted assets and potential losses. Regular assessments of potential losses are discussed by the Umbrella Committee, as are disposal opportunities.

At the same time, special purpose surveys are conducted by the teams on potential losses and changes in risk-weighted assets through internal stress scenarios (risk-weighted assets and loss on completion).

Finally, the Risk division controls risks associated with at-risk securitization positions by identifying ratings downgrades and monitoring changes in exposures (valuation, detailed analysis). Major exposures are systematically submitted to the Group Watchlist and Provisions Committee, which meets quarterly to determine the appropriate level of provisioning.

7.3 Risks related to securitization transactions

Groupe BPCE networks

Presentation of the securitization and credit risk transfer strategy.

Presentation of the internal policies and procedures put in place to ensure, before investing, that institutions have in-depth knowledge of the securitization positions concerned and that institutions comply with the 5% net economic interest retention obligation acting as originator, sponsor or initial lender.

Methods for assessing, monitoring and controlling risks related to securitization arrangements or transactions (and in particular analysis of their economic substance) for originator, sponsor or investor institutions, including *via* crisis scenarios (assumptions, frequency, consequences).

For originator banks, description of the internal process for assessing deconsolidating transactions from a prudential point of view, supported by an audit trail and the procedures for monitoring the transfer of risk over time through a periodic review.

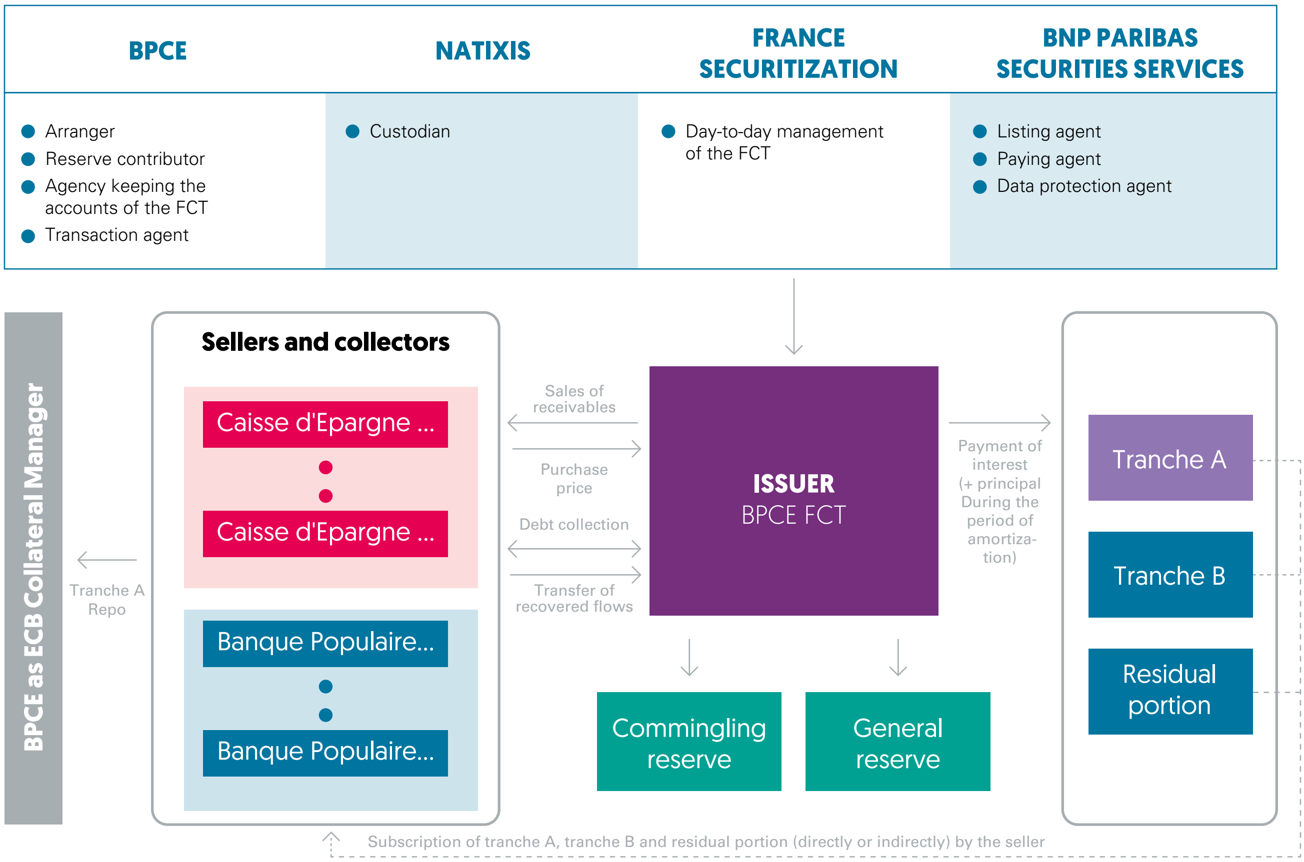
Since May 2014, Groupe BPCE has implemented a securitization program for loans originated by the Caisses d'Epargne and Banques Populaires networks in order to manage and optimize two elements of Groupe BPCE:

- the Group's liquidity reserves, through "self-owned" securitization transactions;
- the Group's refinancing, through securitization transactions placed on the market or with a limited number of investors.

Self-owned securitization transactions

These transactions aim to ensure the sustainability of the collateral stock eligible for the Eurosystem in the form of securities and thus contribute to the creation of the Group's liquidity reserves.

Loans granted by the BP and CEP networks are securitized by selling them to a French securitization fund (*Fonds Commun de Titrisation* – FCT).



The loan transfer operation is carried out in three stages:

1. the participants, the "Sellers", assign their receivables to the FCT;
2. the FCT issues bonds: Senior (used for liquidity purposes) and Subordinated (carrying risks) as well as Residual Units (carrying the results of the activity);
3. the Sellers subscribe for the Senior and Subordinated bonds as well as the Residual Units and then upload the Senior bonds to BPCE, which can use them and value them as liquidity reserves for the Group, in accordance with the Group's collateral centralization policy.

In this arrangement, no securities are placed outside the Group. The Sellers are the subscribers of all the securities and therefore retain all the risks and rewards of the receivables sold. In this way, the receivables removed from the balance sheet of the Sellers under French standards are reintegrated under IFRS due to the consolidation of the FCT.

It should be noted that a "demutualization FCT" has been introduced in the Subordinated Bonds and Residual Units circuit for accounting reasons: the purpose of the Demutualization FCT is to break down the quantity of Subordinated Bonds and Residual Units by institution as well as the income from these securities.

Thus, each Seller is faced with a "FCT silo" which includes its assigned receivables on the assets side and the Senior, Subordinated and Residual Units that it has subscribed on the liabilities side, in a scheme equivalent to the securitization that it would have implemented if it had acted alone.

The receivables sold continue to live according to their usual life cycle (evolution of the CRD) and their management/collection continues to be ensured by the Sellers.

In the event of a "reloadable" transaction, the FCT can regularly buy back new receivables in order to maintain its outstanding amount.

Its proper functioning is ensured by a FCT management company (France Titrisation or EuroTitrisation), together with a custodian, GFS, in compliance with the regulations of the FCT.

In addition, the Senior bonds are rated AAA by two rating agencies, which continue to monitor the transaction on an annual basis.

The loans sold in these transactions are either home loans or personal loans (without mixing within the same FCT) originated by the networks.

The table at the end of the presentation shows the characteristics of the transactions as well as the amounts of the securities subscribed and loans sold for the institution.

The transactions classified as "self-owned" refer to the description above.

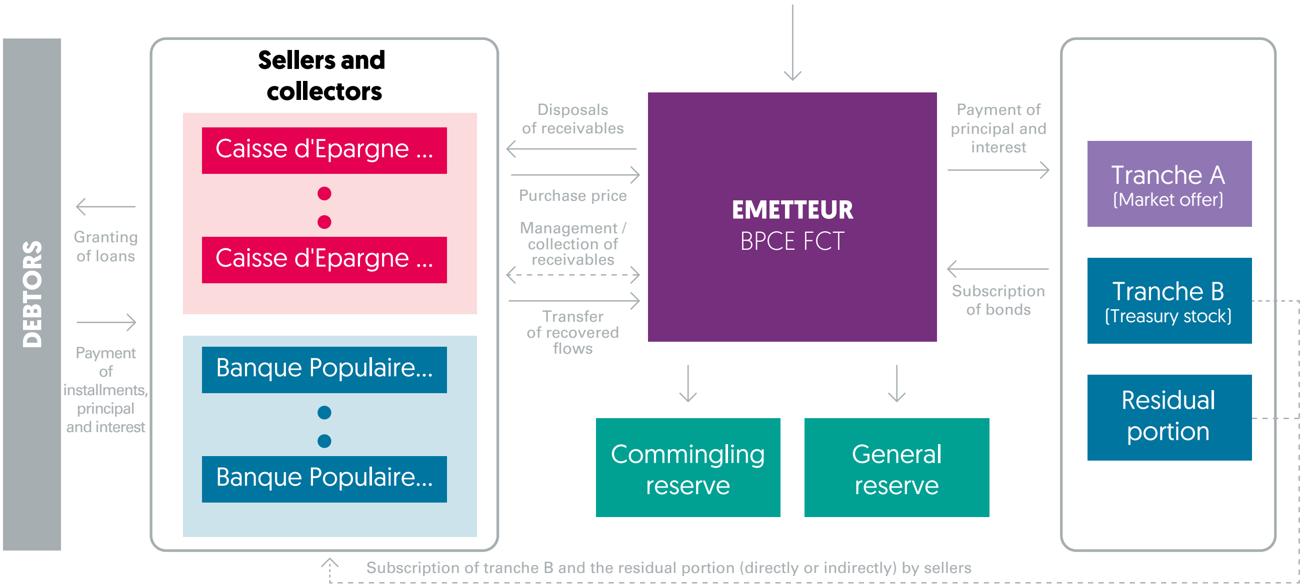
After gaining expertise in securitization transactions, the Group launched operations to provide refinancing.

This refinancing is based on the proper repayment of the loan portfolio provided to the FCT and does not use BPCE's signature.

Generally, the price of this refinancing is below that of BPCE's unsecured refinancing.

Receivables can be contributed to the FCT in two ways:

BPCE	[NATIXIS]	[FRANCE SECURITIZATION]	[BNP PARIBAS SECURITIES SERVICES]
• Arranger • Reserve contributor • Agency keeping the accounts of the FCT • Transaction agent	• Custodian • Swap counterparty	• Day-to-day management of the FCT	• Listing agent • Paying agent • Data protection agent



The disposal operation is carried out in three stages:

1. the participants, the "Sellers", assign their receivables to the FCT;
2. to acquire the receivables, the FCT issues Senior bonds (rated AAA) and Subordinated bonds (carrying risks) as well as Residual Units (carrying the results of the activity);
3. the markets underwrite the Senior bonds, the proceeds of which are paid to the Sellers, who subscribe to the Subordinated bonds as well as the Residual Units: the risks and rewards of the loans.

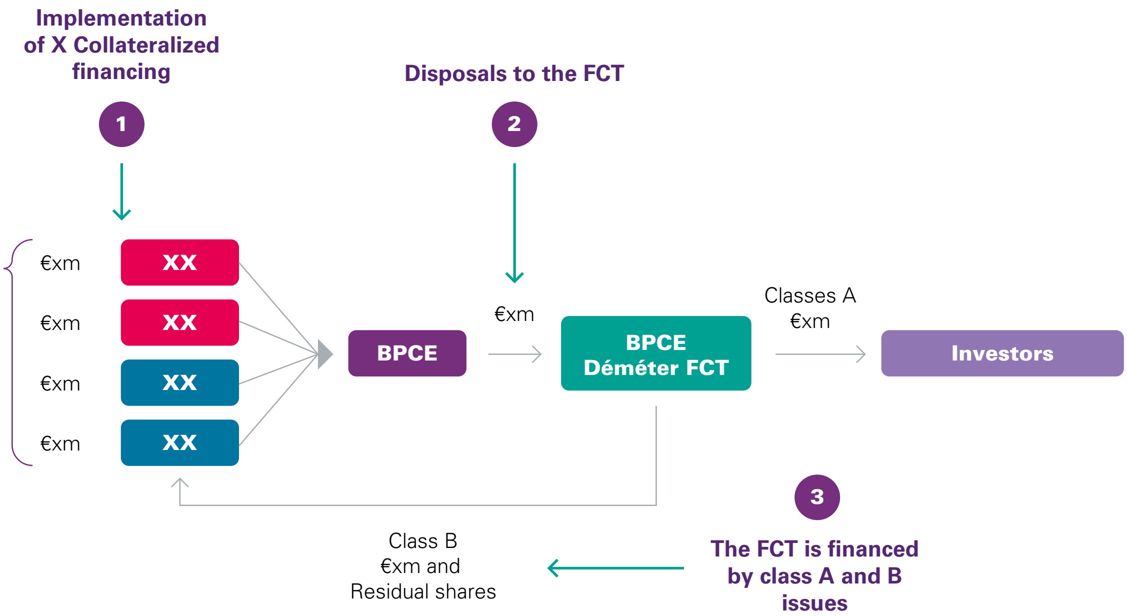
When the receivables sold are remunerated at a fixed rate, as well as the Subordinated bonds, and the Senior bonds are issued at a variable rate, then the FCT enters into a swap with GFS whereby the FCT pays a fixed rate and receives a variable rate in order to hedge the interest rate risk related to the Senior bonds. In addition, GFS processes a back-swap with each of the sellers in proportion to its shareholding.

The accounting behavior of this type of transaction is similar to that described above.

The same applies to the management/recovery of receivables.

Transactions classified as "Refinancing" and "Disposals" in the table at the end of the presentation refer to the description above.

As collateral for loans assigned to the FCT:



The disposal operation is carried out in three stages:

1. each of the participating institutions enters into a loan (CL or collateralized loan) with BPCE.
2. each CL is immediately transferred to the FCT.
3. the FCT issues senior and subordinated notes to finance the acquisition of the CLs.

Each CL is covered by a portfolio of loans as collateral, in accordance with Article L. 211-38 of the French Monetary and Financial Code. Where appropriate, the loan may be covered by cash.

In the event of BPCE's default, the CL becomes repayable immediately and the CLs are transferred to the FCT.

During the reloading period, collateralized loans in default lead to a replenishment of performing loans.

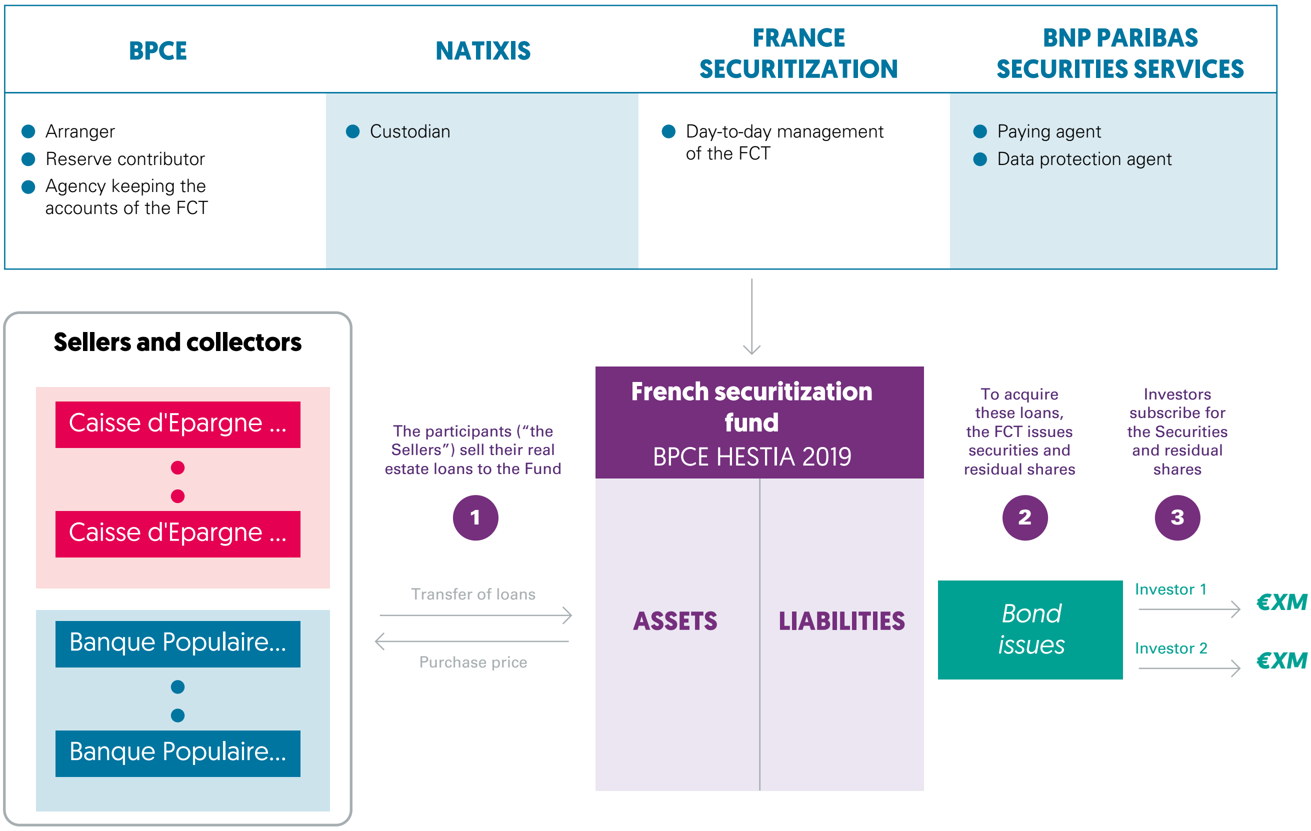
The accounting behavior of this type of transaction is similar to that described above.

The same applies to the management/recovery of receivables.

Transactions classified as "Refinancing" and "Collateralization" in the table at the end of the presentation refer to the description above.

Supplement concerning the HESTIA transaction, which uses securitization tools but is not a securitization transaction from a regulatory point of view.

In September 2020, BPCE had completed a private transaction for the sale of receivables: FCT HESTIA 2019.



This is a deconsolidating transaction for the selling institutions:

1. the sale to the FCT of €500 million of residential real estate loans originated by four Caisses d'Epargne (CEPAC, CEAPC, CECAZ, CEBPL) which continue to manage these loans on behalf of the FCT,
2. to finance its acquisition, the FCT issues Senior bonds (Class A), Subordinated bonds (Class B) and Residual Units,
3. all the securities are subscribed by the investors to whom all the risks associated with the loans sold are definitively transferred.

In the absence of any tranching in the FCT's liabilities, this transaction is not considered as a securitization transaction from a regulatory point of view (not subject to the provisions of regulation 2017/2402 of the European Parliament of 12/12/2017).

The HESTIA transaction appears in the table at the end of the presentation with the qualification of "Refinancing" and "PTF disposal".

12/31/2022

Transaction name (FCT)	Treasury shares / Refinancing	Type of receivables	Launch date	Reload-able Y / N	Disposal/ Collatera-lization	Participating institutions		Amounts issued per transaction			Assigned / collateralized receivables *in €*
						CEP	BP	Senior *in €*	Subordinated *in €*	Residual shares *in €*	
BPCE Master Home Loans FCT	Treasury shares	Residential real estate	May-14	Y	Disposals	15	11	35,200,000,000	4,573,809,000	9,900	39,773,757,850
BPCE CONSUMER LOANS FCT 2016	Treasury shares	Personal loans	May-16	Y	Disposals	15	11	3,325,000,000	831,294,559	16,000	4,140,157,693
BPCE HOME LOANS FCT 2017	Treasury shares	Residential real estate	May-17	N	Disposals	15	11	3,345,567,160	880,240,800	14,000	4,225,821,896
BPCE HOME LOANS FCT 2018	Funding	Residential real estate	Oct-18	N	Disposals	15	11	243,439,100	125,000,000	13,000	368,452,028
BPCE HOME LOANS FCT 2019	Funding	Residential real estate	Oct-19	N	Disposals	15	11	416,091,705	100,000,000	13,000	516,104,778
BPCE HOME LOANS FCT 2020	Funding	Residential real estate	Oct-20	N	Disposals	15	11	666,314,500	90,000,000	13,000	756,327,413
BPCE HOME LOANS FCT 2021 Green UoP	Funding	Residential real estate	Oct-21	N	Disposals	15	11	1,246,595,400	120,000,000	13,000	1,366,608,302
FCT HESTIA 2019	Funding	Residential real estate	Sep-19	N	Disposal PTF	4	0	353,916,107	-	300	353,377,868
BPCE DEMETER 2019 FCT	Funding	Personal loans	Jul-19	Y	Collatera-lization	10	0	1,000,000,000	167,300,000	3,000	1,167,716,802
BPCE DEMETER DUO FCT	Funding	Personal loans	Feb-21	Y	Collatera-lization	4	0	400,000,000	70,600,000	600	470,648,352
BPCE DEMETER TRIA FCT	Funding	Personal loans	Jul-21	Y	Collatera-lization	7	3	750,000,000	243,430,000	1,500	993,592,472
BPCE CONSUMER LOANS FCT 2022	Funding	Personal loans	Jul-22	Y	Disposals	15	11	1,000,000,000	219,500,000	13,000	1,219,325,821
BPCE ELIOS I FCT	Funding	Equipment loans	Dec-22	Y	Collatera-lization	1	0	400,000,000	133,334,000	300	534,037,413

Note: the FCT HESTIA 2019 transaction uses securitization tools but is not a securitization transaction from a regulatory point of view.

BRED

BRED BP regularly securitizes its advances. The securities issued are kept on the balance sheet to strengthen its mobilization capacities at the ECB. The underlying advances are generally home loans and occasionally equipment or professional loans. The stock of eligible securities depends on the rate of securitization. The objective for the bank is not to transfer credit risk but to improve its liquidity.

- The control of risks related to securitization transactions is based on several principles:
- the constitution of the pool of advances is determined by the Finance division under the supervision of the project manager. A detailed analysis of the composition of the deposit is carried out;
- the pool of advances is passed through the centralized IT filter;
- the deposit is systematically analyzed in great detail by two rating agencies (S&P and Fitch Ratings in general).

The deposit is generally audited by a recognized and independent firm.

For information, BRED Banque Populaire carried out a STS securitization transaction in 2022 of a portfolio of residential real estate loans, for a value of nearly €2.9 billion:

- the shares are held in treasury and therefore have no accounting impact in the consolidated financial statements;
- the program has a dual purpose: to strengthen the purchasing power at the ECB and to generate LCR *via* securities exchanges.

						Participating institutions		Amounts subscribed by the ETB			
Creation name	**Treasury shares/ Refinancing**	**Type of receivables**	**Launch date**	**Reload-able Y/N**	**Disposal/ Collatera-lization**	**CEP**	**BP**	**Seniors** *in M€*	**Subordinated** *in ME*	**Residual shares** *in €*	**Assigned / collateralized receivables (in DAR)**
ELIDE 2014	Treasury shares	Residential real estate	11/18/14	N	Disposals		1	826,000,000	71,600,000	300	915,000,829
ELIDE 2017-01	Treasury shares	Residential real estate	2/2/17	N	Disposals		1	1,722,500,000	87,500,000	300	1,842,301,251
ELIDE 2017-02	Treasury shares	Residential real estate	4/27/17	N	Disposals		1	956,000,000	76,100,000	300	1,050,595,774
ELIDE 2018-01	Treasury shares	Residential real estate	5/29/18	N	Disposals		1	1,167,300,000	198,000,000	300	1,389,011,569
ELIDE 2021-01	Treasury shares	Residential real estate	3/25/21	N	Disposals		1	2,584,300,000	312,400,000	300	2,920,133,058
ELIDE 2022-01	Treasury shares	Residential real estate	11/24/22	N	Disposals		1	2,260,000,000	230,000,000	300	2,500,026,552

7.4 Quantitative disclosures

Breakdown of exposures and risk-weighted assets

BPCE22 – BREAKDOWN OF EXPOSURES BY TYPE OF SECURITIZATION

	12/31/2022		12/31/2021	
in millions of euros	Exposures	EAD	Exposures	EAD
Banking book	**23,702**	**22,480**	**20,041**	**18,462**
Traditional securitization	20,288	19,400	17,306	16,237
Synthetic securitization	3,414	3,079	2,735	2,225
Trading book	**314**	**314**	**793**	**793**
TOTAL	**24,016**	**22,793**	**20,834**	**19,255**

BPCE23 – BREAKDOWN OF EAD AND RWA BY TYPE OF PORTFOLIO

	12/31/2022		12/31/2021		Change	
in millions of euros	EAD	Risk-Weighted Assets	EAD	Risk-Weighted Assets	EAD	Risk-Weighted Assets
Banking book	**22,480**	**4,408**	**18,462**	**4,100**	**4,018**	**308**
Investor	7,316	1,869	6,198	1,976	1,117	(107)
Originator	3,412	826	2,539	795	874	31
Sponsor	11,751	1,713	9,725	1,329	2,026	384
Trading book	**314**	**220**	**793**	**514**	**(480)**	**(295)**
Investor	313	219	793	514	(480)	(295)
Originator	0	0	-	-	0	0
Sponsor	-	-	-	-	-	-

Breakdown by rating

BPCE24 – BREAKDOWN OF INVESTOR SECURITIZATION EXPOSURES IN THE BANKING BOOK BY RATING

	12/31/2022		12/31/2021	
as a %	Standard & Poor's equivalent rating	Banking book	Standard & Poor's equivalent rating	Banking book
	AAA	45%	AAA	45%
	AA+	6%	AA+	8%
	AA	4%	AA	5%
	AA-	3%	AA-	5%
	A+	5%	A+	6%
	A	0%	A	0%
	A-	0%	A-	0%
	BBB+	2%	BBB+	2%
	BBB	0%	BBB	1%
Investment grade	BBB-	0%	BBB-	0%
	BB+	3%	BB+	5%
	BB	0%	BB	0%
	BB-	0%	BB-	0%
	B+	0%	B+	0%
	B	0%	B	0%
	B-	0%	B-	0%
	CCC+	0%	CCC+	0%
	CCC	0%	CCC	0%
	CCC-	0%	CCC-	0%
	CC	0%	CC	0%
Non-investment grade	C	0%	C	0%
Not rated	Not rated	30%	Not rated	23%
Default	D	0%	D	0%
TOTAL		**100%**		**100%**

BPCE25 – BREAKDOWN OF INVESTOR AND SPONSOR SECURITIZATION EXPOSURES IN THE TRADING BOOK

	12/31/2022		12/31/2021	
as a %	Standard & Poor's equivalent rating	Banking book	Standard & Poor's equivalent rating	Banking book
	AAA	50%	AAA	48%
	AA+	7%	AA+	5%
	AA	7%	AA	10%
	AA-	1%	AA-	2%
	A+	2%	A+	2%
	A	1%	A	3%
	A-	5%	A-	1%
	BBB+	0%	BBB+	0%
	BBB	3%	BBB	1%
Investment grade	BBB-	0%	BBB-	1%
	BB+	0%	BB+	0%
	BB	1%	BB	2%
	BB-	2%	BB-	2%
	B+	0%	B+	0%
	B	0%	B	0%
	B-	0%	B-	0%
	CCC+	0%	CCC+	0%
	CCC	0%	CCC	0%
	CCC-	0%	CCC-	0%
	CC	0%	CC	7%
Non-investment grade	C	0%	C	0%
Not rated	Not rated	19%	Not rated	17%
Default	D	0%	D	0%
TOTAL		**100%**		**100%**

7.5 Detailed quantitative disclosures

Banking book

EU SEC1 – BANKING BOOK – SECURITIZATION EXPOSURES

		12/31/2022											
		a	c	e	g	h	i	j	k	l	m	n	o
		Institution acts as originator				Institution acts as sponsor				Institution acts as investor			
		Traditional				Traditional				Traditional			
in millions of euros		STS	Non-STS	Synthetic	Sub-total	STS	Non-STS	Synthetic	Sub-total	STS	Non-STS	Synthetic	Sub-total
1	**Total exposures**	**-**	**333**	**3,079**	**3,412**	**1,241**	**10,510**	**-**	**11,751**	**1,714**	**5,602**	**-**	**7,316**
2	***Retail (total)***	**-**	***25***	**-**	***25***	**-**	***2,576***	**-**	***2,576***	***1,714***	***3,469***	**-**	***5,183***
3	*residential mortgage loans*	-	*25*	-	*25*	-	*2,164*	-	*2,164*	*1,714*	*926*	-	*2,640*
4	*credit cards*	-	-	-	-	-	*204*	-	*204*	-	*2,271*	-	*2,271*
5	other retail exposures	-	-	-	-	-	208	-	208	0	271	-	271
6	*re-securitization*	-	-	-	-	-	-	-	-	-	-	-	-
7	***Wholesale (total)***	**-**	***308***	***3,079***	***3,387***	***1,241***	***7,934***	**-**	***9,175***	**-**	***2,133***	**-**	***2,133***
8	*corporate loans*	-	*17*	*3,079*	*3,096*	-	*6,827*	-	*6,827*	-	*1,659*	-	*1,659*
9	*commercial mortgage loans*	-	*291*	-	*291*	-	-	-	-	-	*14*	-	*14*
10	leases and advances	-	-	-	-	1,241	630	-	1,871	-	255	-	255
11	other wholesale exposures	-	-	-	-	-	478	-	478	-	196	-	196
12	re-securitization	-	-	-	-	-	-	-	-	-	10	-	10

		12/31/2021											
		a	c	e	g	h	i	j	k	l	m	n	o
		Institution acts as originator				Institution acts as sponsor				Institution acts as investor			
		Traditional				Traditional				Traditional			
in millions of euros		STS	Non-STS	Synth-etic	Sub-total	STS	Non-STS	Synth-etic	Sub-total	STS	Non-STS	Synth-etic	Sub-total
1	**Total exposures**	**-**	**402**	**2,137**	**2,539**	**942**	**8,783**	**-**	**9,725**	**434**	**5,676**	**88**	**6,198**
2	***Retail (total)***	***-***	***69***	***-***	***69***	***-***	***2,063***	***-***	***2,063***	***434***	***4,771***	***88***	***5,294***
3	*residential mortgage loans*	*-*	*69*	*-*	*69*	*-*	*1,867*	*-*	*1,867*	*434*	*2,515*	*-*	*2,950*
4	credit cards	-	-	-	-	-	-	-	-	-	1,984	-	1,984
5	*other retail exposures*	*-*	*-*	*-*	*-*	*-*	*196*	*-*	*196*	*0*	*272*	*88*	*360*
6	*re-securitization*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
7	***Wholesale (total)***	***-***	***333***	***2,137***	***2,470***	***942***	***6,720***	***-***	***7,662***	***-***	***905***	***-***	***905***
8	*corporate loans*	*-*	*17*	*2,127*	*2,145*	*-*	*5,499*	*-*	*5,499*	*-*	*546*	*-*	*546*
9	commercial mortgage loans	-	315	9	325	-	-	-	-	-	11	-	11
10	leases and advances	-	-	-	-	942	809	-	1,751	-	78	-	78
11	other wholesale exposures	-	-	-	-	-	412	-	412	-	270	-	270
12	re-securitization	-	-	-	-	-	-	-	-	-	0	-	0

EU SEC3 – BANKING BOOK – SECURITIZATION EXPOSURES AND ASSOCIATED REGULATORY CAPITAL REQUIREMENTS (ORIGINATOR AND SPONSOR POSITIONS)

		12/31/2022																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
		Exposure values (by RW bands/deductions)					Exposure value (by regulatory approach)				Risk-Weighted Assets (by regulatory approach)				Capital requirement after application of the cap			
	in millions of euros	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	≤1250% RW Deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	≤1250% RW Deductions
1	**Total exposures**	**14,986**	**109**	**14**	**37**	**18**	**3,266**	**291**	**11,589**	**17**	**508**	**113**	**1,703**	**214**	**41**	**9**	**136**	**17**
2	**Traditional transactions**	**11,906**	**109**	**14**	**37**	**18**	**187**	**291**	**11,589**	**17**	**44**	**113**	**1,703**	**214**	**4**	**9**	**136**	**17**
3	Securitization	11,906	109	14	37	18	187	291	11,589	17	44	113	1,703	214	4	9	136	17
4	Retail	2,492	103	2	3	-	11	0	2,590	(0)	9	2	391	-	1	0	31	-
5	of which STS	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
6	Wholesale	9,414	6	12	34	18	176	291	8,999	17	36	111	1,312	214	3	9	105	17
7	of which STS	1,241	-	-	-	-	-	-	1,241	-	-	-	122	-	-	-	10	-
8	Re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	**Synthetic transactions**	**3,079**	**-**	**-**	**0**	**0**	**3,079**	**-**	**-**	**0**	**464**	**-**	**-**	**0**	**37**	**-**	**-**	**0**
10	Securitization	3,079	-	-	0	0	3,079	-	-	0	464	-	-	0	37	-	-	0
11	Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Wholesale	3,079	-	-	0	0	3,079	-	-	0	464	-	-	0	37	-	-	0
13	Re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		12/31/2021																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
		Exposure values (by RW bands/deductions)					Exposure value (by regulatory approach)				Risk-Weighted Assets (by regulatory approach)				Capital requirement after application of the cap			
	in millions of euros	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	≤1250% RW Deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	≤1250% RW Deductions
1	**Total exposures**	**11,563**	**650**	**1**	**23**	**26**	**2,321**	**275**	**9,644**	**24**	**387**	**108**	**1,326**	**303**	**31**	**9**	**106**	**24**
2	**Traditional transactions**	**9,901**	**175**	**1**	**23**	**26**	**184**	**275**	**9,644**	**24**	**38**	**108**	**1,326**	**303**	**3**	**9**	**106**	**24**
3	Securitization	9,901	175	1	23	26	184	275	9,644	24	38	108	1,326	303	3	9	106	24
4	Retail	2,014	118	-	-	-	-	-	2,132	-	-	-	342	-	-	-	27	-
5	of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Wholesale	7,887	57	1	23	26	184	275	7,512	24	38	108	984	303	3	9	79	24
7	of which STS	942	-	-	-	-	-	-	942	-	-	-	92	-	-	-	7	-
8	Re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	**Synthetic transactions**	**1,662**	**475**	**-**	**0**	**0**	**2,137**	**-**	**-**	**0**	**349**	**-**	**-**	**0**	**28**	**-**	**-**	**0**
10	Securitization	1,662	475	-	0	0	2,137	-	-	0	349	-	-	0	28	-	-	0
11	Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Wholesale	1,662	475	-	0	0	2,137	-	-	0	349	-	-	0	28	-	-	0
13	Re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

EU SEC4 – BANKING BOOK – SECURITIZATION EXPOSURES AND RELATED REGULATORY CAPITAL REQUIREMENTS (INVESTOR POSITIONS)

		12/31/2022																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
		Exposure values (by RW bands/deductions)					Exposure value (by regulatory approach)				Risk-Weighted Assets (by regulatory approach)				Capital requirement after cap			
in millions of euros		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB RBA (incl-uding IAA)	IRB SFA	SA/ SSFA	1250%	IRB RBA (incl-uding IAA)	IRB SFA	SA/ SSFA	1250%	IRB RBA (incl-uding IAA)	IRB SFA	SA/ SSFA	1250%
1	**Total exposures**	**5,850**	**997**	**204**	**264**	**1**	**-**	**4,820**	**2,496**	**1**	**-**	**1,455**	**404**	**10**	**-**	**116**	**32**	**1**
2	**Traditional securitization**	**5,850**	**997**	**204**	**264**	**1**	**-**	**4,820**	**2,496**	**1**	**-**	**1,455**	**404**	**10**	**-**	**116**	**32**	**1**
3	Securitization	5,850	997	194	264	1	-	4,820	2,486	1	-	1,455	394	8	-	116	32	1
4	Retail underlying	3,893	908	143	239	0	-	4,481	702	0	-	1,327	115	0	-	106	9	0
5	of which STS	1,714	-	-	-	-	-	1,714	0	-	-	181	0	-	-	15	0	-
6	Wholesale	1,957	89	52	25	1	-	339	1,784	1	-	127	280	8	-	10	22	1
7	of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Re-securitization	-	-	10	-	0	-	-	10	0	-	-	10	1	-	-	1	0
9	**Synthetic securitization**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
10	Securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		12/31/2021																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
		Exposure values (by RW bands/deductions)					Exposure value (by regulatory approach)				Risk-Weighted Assets (by regulatory approach)				Capital requirement after cap			
in millions of euros		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB RBA (incl-uding IAA)	IRB SFA	SA/ SSFA	1250%	IRB RBA (incl-uding IAA)	IRB SFA	SA/ SSFA	1250%	IRB RBA (incl-uding IAA)	IRB SFA	SA/ SSFA	1250%
1	**Total exposures**	**4,482**	**1,155**	**182**	**377**	**3**	**-**	**4,555**	**1,641**	**3**	**-**	**1,673**	**270**	**33**	**-**	**134**	**22**	**3**
2	**Traditional securitization**	**4,393**	**1,155**	**182**	**377**	**3**	**-**	**4,555**	**1,552**	**3**	**-**	**1,673**	**257**	**33**	**-**	**134**	**21**	**3**
3	Securitization	4,393	1,155	182	377	3	-	4,555	1,552	3	-	1,673	257	32	-	134	21	3
4	Retail underlying	3,529	1,136	180	358	1	-	4,449	755	1	-	1,615	137	16	-	129	11	1
5	of which STS	434	-	-	-	-	-	433	1	-	-	43	0	-	-	3	0	-
6	Wholesale	864	18	2	19	1	-	106	797	1	-	57	120	15	-	5	10	1
7	of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Re-securitization	-	-	-	-	0	-	-	-	0	-	-	-	1	-	-	-	0
9	**Synthetic securitization**	**88**	**-**	**-**	**-**	**-**	**-**	**-**	**88**	**-**	**-**	**-**	**13**	**-**	**-**	**-**	**1**	**-**
10	Securitization	88	-	-	-	-	-	-	88	-	-	-	13	-	-	-	1	-
11	Retail underlying	88	-	-	-	-	-	-	88	-	-	-	13	-	-	-	1	-
12	Wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BPCE26 – BANKING BOOK – BREAKDOWN OF SECURITIZATION OUTSTANDINGS

	12/31/2022				12/31/2021			
	Securitization	Re-securitization	Securitization	Re-securitization	Securitization	Re-securitization	Securitization	Re-securitization
in millions of euros	EAD	EAD	Risk-Weighted Assets	Risk-Weighted Assets	EAD	EAD	Risk-Weighted Assets	Risk-Weighted Assets
Investor positions	**7,306**	**10**	**1,858**	**11**	**6,198**	**0**	**1,975**	**1**
On-balance sheet exposures	6,621	10	1,742	10	5,397	0	1,796	0
Off-balance sheet exposure and derivatives	685	0	116	1	802	0	179	1
Originator positions	**3,412**	**-**	**826**	**-**	**2,539**	**-**	**795**	**-**
On-balance sheet exposures	3,412	-	826	-	2,531	-	792	-
Off-balance sheet exposure and derivatives	0	-	0	-	8	-	3	-
Sponsor positions	**11,751**	**-**	**1,713**	**-**	**9,725**	**-**	**1,329**	**-**
On-balance sheet exposures	281	-	47	-	0	-	0	-
Off-balance sheet exposure and derivatives	11,471	-	1,666	-	9,725	-	1,329	-
TOTAL	**22,470**	**10**	**4,397**	**11**	**18,462**	**0**	**4,098**	**1**

Trading book

EU SEC 2 – TRADING BOOK – SECURITIZATION EXPOSURES

		a	c	d	e	g	h	i	k	l
		Institution acts as originator			Institution acts as sponsor			Institution acts as investor		
		Traditional			Traditional			Traditional		
in millions of euros		STS	Synthetic	Sub-total	STS	Synthetic	Sub-total	STS	Synthetic	Sub-total
1	**Total exposures**	**-**	**0**	**-**	**-**	**-**	**-**	**313**	**-**	**313**
2	**Retail (total)**	**-**	**-**	**-**	**-**	**-**	**-**	**125**	**-**	**125**
3	residential mortgage loans	-	-	-	-	-	-	90	-	90
4	credit cards	-	-	-	-	-	-	6	-	6
5	other retail exposures	-	-	-	-	-	-	29	-	29
6	re-securitization	-	-	-	-	-	-	-	-	-
7	**Wholesale (total)**	**0**	**0**	**-**	**-**	**-**	**-**	**188**	**-**	**188**
8	corporate loans	-	-	-	-	-	-	147	-	147
9	commercial mortgage loans	0	0	-	-	-	-	8	-	8
10	leases and advances	-	-	-	-	-	-	27	-	27
11	other wholesale exposures	-	-	-	-	-	-	7	-	7
12	re-securitization	-	-	-	-	-	-	-	-	-

		a	c	d	e	g	h	i	k	l
		Institution acts as originator			Institution acts as sponsor			Institution acts as investor		
		Traditional			Traditional			Traditional		
in millions of euros		STS	Synthetic	Sub-total	STS	Synthetic	Sub-total	STS	Synthetic	Sub-total
1	**Total exposures**	**-**	**-**	**-**	**-**	**-**	**-**	**793**	**-**	**793**
2	**Retail (total)**	**-**	**-**	**-**	**-**	**-**	**-**	**507**	**-**	**507**
3	residential mortgage loans	-	-	-	-	-	-	351	-	351
4	credit cards	-	-	-	-	-	-	126	-	126
5	other retail exposures	-	-	-	-	-	-	30	-	30
6	re-securitization	-	-	-	-	-	-	-	-	-
7	**Wholesale (total)**	**-**	**-**	**-**	**-**	**-**	**-**	**286**	**-**	**286**
8	corporate loans	-	-	-	-	-	-	208	-	208
9	commercial mortgage loans	-	-	-	-	-	-	30	-	30
10	leases and advances	-	-	-	-	-	-	47	-	47
11	other wholesale exposures	-	-	-	-	-	-	1	-	1
12	re-securitization	-	-	-	-	-	-	-	-	-

EU SEC5 – SECURITIZATION EXPOSURES – DEFAULTED EXPOSURES AND ADJUSTMENTS FOR SPECIFIC CREDIT RISK

		12/31/2022		
		a	b	c
		Exposures securitized by the institution – Institution acts as originator or as sponsor		
		Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period
in millions of euros			Of which exposures in default	
1	**Total exposures**	**19,103**	**121**	**0**
2	**Retail (total)**	**2,478**	**13**	**-**
3	residential mortgage loans	2,149	2	-
4	credit cards	125	-	-
5	other retail exposures	204	12	-
6	re-securitization	-	-	-
7	**Wholesale (total)**	**16,624**	**107**	**0**
8	corporate loans	8,334	98	0
9	commercial mortgage loans	6,482	-	-
10	leases and advances	1,507	10	-
11	other wholesale exposures	302	-	-
12	re-securitization	-	-	-

		12/31/2021		
		a	b	c
		Exposures securitized by the institution – Institution acts as originator or as sponsor		
		Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period
in millions of euros			Of which exposures in default	
1	**Total exposures**	**15,958**	**110**	**0**
2	**Retail (total)**	**1,499**	**11**	**-**
3	residential mortgage loans	1,307	1	-
4	credit cards	-	-	-
5	other retail exposures	192	11	-
6	re-securitization	-	-	-
7	**Wholesale (total)**	**14,459**	**99**	**0**
8	corporate loans	6,321	91	0
9	commercial mortgage loans	6,474	-	-
10	leases and advances	1,402	7	-
11	other wholesale exposures	263	-	-
12	re-securitization	-	-	-

8

MARKET RISKS

8.1 Market risk policy

Risk policies governing market transactions are defined by the Risk divisions of institutions with trading activities. These policies are based on a qualitative and forward-looking perspective.

In addition, for the banking book activities, investment policies are defined at Group level. The risk management framework related to this activity is defined in accordance with investment policies and is reviewed annually.

8.2 Market risk management

The Risk division works in the areas of risk measurement, definition and oversight of limits, and supervision of market risks. It is tasked with the following duties:

8.2.1 Management

Risk measurement:

- establishing the principles of market risk measurement, which are then validated by the various appropriate Risk Committees;
- implementing the tools needed to measure risk on a consolidated basis;
- producing risk measurements, including those corresponding to operational market limits, or ensuring that they are produced as part of the risk management process;
- determining policies for adjusting values or delegating them to the Risk divisions of the relevant institutions and centralizing the information;
- performing Level 2 validation of operating results and cash valuation methods.

Definition and oversight of limits:

- examining the limit framework and setting limits (global caps and, where necessary, operational limits) adopted by the various appropriate Risk Committees, as part of the comprehensive risk management process;
- examining the list of authorized products for the relevant institutions and the conditions to be observed, and submitting them for approval to the appropriate Market Risk Committee;
- examining requests for investments in financial products, or in new capital market products or activities, by the relevant banking institutions;
- harmonizing processes used to manage trading book allocations and medium- to long-term portfolios of the Banque Populaire and Caisse d'Epargne networks (indicators, definition of indicator limits, oversight and control process, and reporting standards).

8.2.2 Monitoring

For the monitoring and control of market risks:

- consolidating the mapping of Group market risks and contributing to the macro-risk mapping of Group and institution risks;
- performing or overseeing daily supervision of positions and risks with respect to allocated limits (overall and operational limits) and established resilience thresholds, organizing the decision-making framework for limit breaches and performing or overseeing permanent supervision of limit breaches and their resolution;
- preparing the consolidated dashboard for the various decision-making bodies;
- defining and performing controls.

MARKET RISK MEASUREMENT METHODS

From a prudential standpoint, Groupe BPCE uses the standardized approach to measure market risk. The risk monitoring system relies on three types of indicators used to manage activity, on an overall basis and by similar activity, by focusing on directly observable criteria, including:

- sensitivity to variations in the underlying instrument, variations in volatility or to correlation, nominal amounts, and diversification indicators. The limits corresponding to these qualitative and quantitative operational indicators thus complement the VaR limits and stress tests;
- daily assessment of global market risk measurement through a 99% 1-day VaR;
- stress tests to measure potential losses on portfolios in extreme market conditions. The Group system relies on comprehensive stress tests and specific stress tests for each activity.

Special reports on each business line are sent daily to the relevant operational staff and managers. BPCE's Risk division also provides a weekly report summarizing all of the Group's market risk, with a detailed breakdown for GFS, BRED Banque Populaire and Banque Palatine.

In addition, for GFS, global market risk reports are sent to the central institution on a daily basis. The latter produces a weekly summary of market risk indicators and results for the Group's executive management.

Finally, a global review of Groupe BPCE's consolidated market risks (covering VaR measures and hypothetical/historic stress scenarios) is presented to the Group Market Risk Committee, in addition to risk reports prepared for the entities.

In response to the Revised Pillar III Disclosure Requirements (MRB Table: Qualitative disclosures for banks using the Internal Models Approach), the main characteristics of the various models used for market risk are presented in the GFS Registration Document.

The internal market risk and valuation models used by GFS are validated by the Model Risk Management and Wholesale Banking Validation team of Groupe BPCE's Risk division. This independent validation of the models is part of the broader model risk management framework described in Section 6.5.2.

More specifically for the valuation models, the following aspects are assessed:

- theoretical and mathematical validation of the model, analysis of the assumptions and their justification in the model documentation;
- algorithmic validation and comparison with alternative models (benchmarking);
- analysis of the stability, the convergence of the numerical method, the stability of the model in the event of stressed scenarios;
- study of implicit risk factors and calibration, analysis of input data, and identification of upstream models;
- measurement of the model risk and validation of the associated reserve methodology.

SENSITIVITIES

Each institution's Risk division monitors and verifies compliance with sensitivity limits on a daily basis. If a limit is breached, an alert procedure is triggered in order to define the measures required to return within operational limits.

VAR

Market risk is also monitored and assessed *via* synthetic VaR calculations, which determine potential losses generated by each business line at a given confidence level (99%) and over a given holding period (one day). For calculation purposes, changes in market inputs used to determine portfolio values are modeled using statistical data.

All decisions relating to risk factors using the internal calculation tool are revised regularly by committees involving all of the relevant participants (Risk division, Front Office and Results department). Quantitative and objective tools are also used to measure the relevance of risk factors.

VaR is based on numerical simulations, using a Monte-Carlo method which takes into account possible non-linear portfolio returns based on the different risk factors. It is calculated and monitored daily for all Group trading books, and a VaR limit is defined on a global level and per business line. The calculation tool generates 10,000 scenarios, which provides satisfactory precision levels. For certain complex products, which account for a minor share of the trading books, their inclusion in the VaR calculation is obtained by using sensitivities. VaR backtesting is carried out on approved scopes and confirms the overall robustness of the model used. Extreme risks, which are not included in VaR, are accounted for using stress tests throughout the Group.

This internal VaR model used by GFS was approved by the *Autorité de contrôle prudentiel et de résolution* (ACPR), the French prudential supervisory authority for the banking and insurance sector, in January 2009. GFS thus uses VaR to calculate the capital requirements for market risks in the approved scopes.

STRESS TESTS

Stress tests are calibrated according to severity and occurrence levels, which are consistent with portfolio management objectives:

Trading book stress tests are calibrated over a 10-day period and a 10-year probability of occurrence. They are based on:

- historical scenarios, which reproduce changes in market conditions observed during past crises, their impacts on current positions and P&Ls. They can be used to assess the exposure of the Group's activities to known scenarios. Twelve historical stress tests have been in place since 2010;
- hypothetical scenarios, which involve simulating changes in market conditions in all activities based on plausible assumptions concerning the dissemination of an initial shock. These shocks are based on scenarios defined according to economic criteria (real estate crisis, economic crisis, etc.), geopolitical considerations (terrorist attacks in Europe, toppling of a regime in the Middle East, etc.) or other factors (bird flu, etc.). The Group has had seven theoretical stress tests since 2010.

Banking book stress tests are calibrated over a longer period in line with the banking book's management periods:

- a bond stress test calibrated using a mixed hypothetical-historical approach that reproduces a stress on European sovereigns (similar to the 2011 crisis);
- a bond stress test calibrated using a mixed hypothetical-historical approach that reproduces a stress on corporates (similar to the 2008 crisis);
- an equity stress test calibrated over the 2011 historical period, applied to equity investments for the purpose of the liquidity reserve;
- a private equity and real estate stress test, calibrated over the 2008 historical period, applied to the private equity and real estate portfolios.

The different stress tests are subject to limits set by institution and for the Group. These are monitored as part of the recurring control system and through regular reporting.

8.2.3 Control

INDEPENDENT PRICE VERIFICATION

The Group has established an organizational structure tasked with independent price verification (IPV) through:

- creation of a Group valuation team in the Market Risk division;
- Group governance to ensure compliance.

The Valuation Team is responsible for:

- meeting regulatory requirements and implementing said requirements while assessing their impacts on the production and verification of new indicators;
- standardizing and harmonizing the production, certification and communication of market inputs used in valuation processes;
- coordinating and overseeing valuation processes group-wide, in order to guarantee the convergence of IPV methods and principles;
- harmonizing fair value level processes across the Group.

Group governance is based in particular on:

- a supervision system centered on the Group Valuation Committee and the Group Fair Value Level Committee;
- a body of procedures, including the Group IPV procedure, which explains the validation and escalation system.

RISK MONITORING

The Group Risk division is responsible for monitoring the risks associated with all Groupe BPCE capital market activities, subject to regular review by the Group Market Risk Committee.

Within the scope of the trading book, market risk is monitored daily by measuring Group Value at Risk (VaR) and performing global and historical stress tests. The proprietary VaR calculation system developed by GFS is used by the Group. This system provides a tool for the measurement, monitoring and control of market risk at the consolidated level and for each institution, on a daily basis and taking account of correlations between the various portfolios. There are certain distinctive characteristics of Groupe BPCE that must be considered, in particular:

- for GFS: given the size of its capital markets business, GFS' risk management system is specifically tailored to this entity;
- for the Banque Populaire network: only BRED Banque Populaire has a capital markets business. It monitors the financial transactions carried out by the Banque Populaire network trading floor and Finance division daily, using 99% 1-day Value at Risk, sensitivity, volume and stress scenario indicators;
- for Banque Palatine: daily monitoring of trading book activities is based on the Risk division's supervision of 99% 1-day Value at Risk, stress tests and compliance with regulatory limits.

All limits (operational indicators, VaR, and stress tests) are monitored daily by each institution's Risk division. Any limit breaches must be reported and, where applicable, are subject to a Management decision concerning the position in question (close, hedge, hold, etc.).

These supervisory mechanisms also have operational limits and resilience thresholds that determine the Group's risk appetite for trading operations.

Banking book risk is supervised and monitored by activity: liquidity reserves, illiquid assets (private equity, non-operational real estate), securitizations and liquid assets excluding liquidity reserves. Liquidity reserves and liquid assets excluding liquidity reserves are monitored monthly, mainly *via* stress test indicators. Illiquid assets and securitizations are monitored quarterly.

The Group's single treasury and central bank collateral management pool is subject to daily monitoring of risks and economic results for all of its activities, which are mainly related to the banking book.

HIGHLIGHTS

- The Group strengthened its financial risk management during this period, which combined a correction in the equity markets, a strong increase in volatility affecting all asset classes and the change of regime on rates and inflation.
- A very close monitoring of market activities was carried out during this period to ensure that changes in exposures following market movements remained in line with the risk appetite and the regulatory framework.
- In addition, the impacts of the sharp rise in interest rates and high inflation on the banking book activities were assessed *via* specific studies and stress test measures. Closer monitoring of interest rate exposures in retail banking was put in place, thus making it possible to adapt the management of interest rate risk to the new market context.
- Liquidity continued to be closely monitored with, in particular, closer management of commercial liquidity and monitoring of customer behavior in the context of interest rates and inflation.

8.3 Quantitative disclosures

The VaR of Groupe BPCE's trading scope amounted to €10.3 million at December 30, 2022.

The 2022 market context was marked by increased volatility across all asset classes, explained firstly by the escalation of the conflict in Ukraine and then by the rapid evolution of the interest rate and inflation environment. In this context of volatility, the VaR indicator remained at relatively moderate levels (average of €10.8 million), reflecting the prudent management of the Group's trading portfolios.

In addition, the average stress test levels remained stable overall. Over the year, the most penalizing scenarios were the hypothetical scenarios of a financial institution default (1 day out of 2) and a liquidity crisis (1 in 4). At December 30, 2022, the worst stress test amounted to -€12 million.

Groupe BPCE VaR

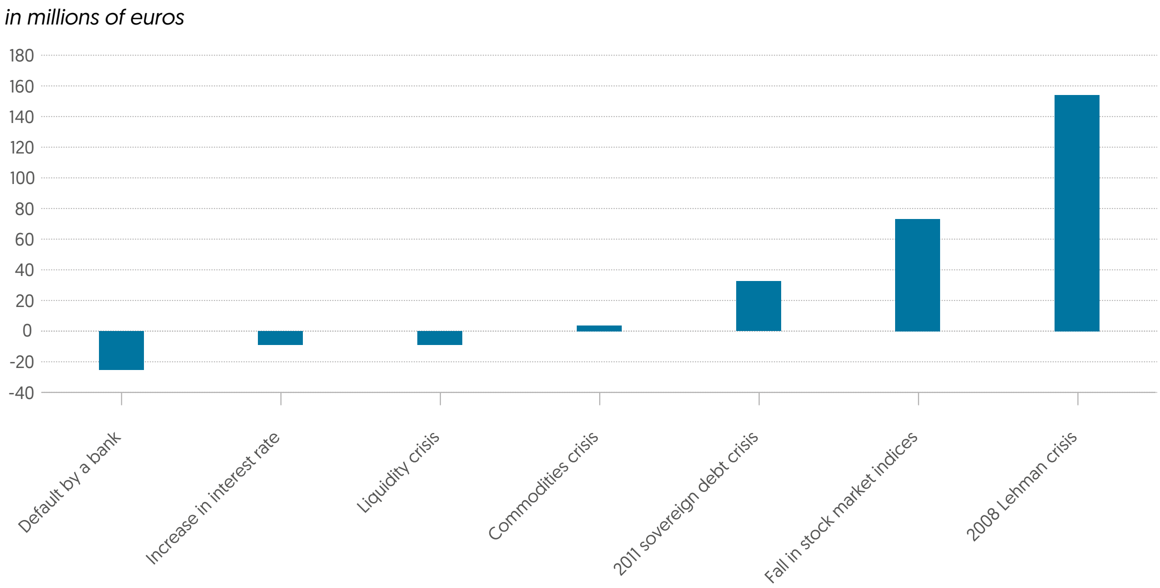
BPCE27 – BREAKDOWN BY RISK CLASS

	Monte-Carlo VaR 99%				
in millions of euros	12/31/2022	average	min	max	12/31/2021
Equity risk	6.7	7.1	5.3	9.2	6.3
Foreign exchange risk	3.3	2.3	0.9	4.1	2.9
Commodity risk	1	1.3	0.7	3.4	0.8
Credit risk	2.4	1.6	0.8	3.4	0.9
Interest rate risk	6.3	7.1	3.5	10.7	4.7
TOTAL	**19.7**	**0**	**0**	**0**	**15.6**
Compensation effect	(9.4)	0	0	0	(7.3)
Consolidated VaR	**10.3**	**10.8**	**7.3**	**14.5**	**8.3**

BPCE28 – CHANGE IN 2022

Trading book stress test results

BPCE29 – GROUP STRESS TEST AVERAGE



Risk-weighted assets and capital requirements

BPCE30 – RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENTS BY TYPE OF RISK

	12/31/2022		12/31/2021	
in billions of euros	Risk-Weighted Assets	Capital requirements	Risk-Weighted Assets	Capital requirements
Interest rate risk	1,813	145	2,729	218
Equity risk	421	34	822	66
UCI position risk	62	5	73	6
Exchange rate risk	4,739	379	3,708	297
Commodity risk	941	75	1,725	138
Settlement/delivery risk	65	5	11	1
Major trading book risks	-	-	-	-
Specific risk on securitization positions	220	18	514	41
IMA Risk	7,170	574	5,571	446
TOTAL	**15,430**	**1,234**	**15,153**	**1,212**

BPCE 31 – CHANGE IN RISK-WEIGHTED ASSETS BY IMPACT

in billions of euros

Market risks – 12/31/2021	**15.1**
Standard	8.2
Internal model	7.2
VaR	*2.6*
SVaR	*4.1*
IRC	*0.4*
MARKET RISKS – 12/31/2022	**15.3**

8.4 Detailed quantitative disclosures

The detailed quantitative disclosures relating to market risk in the following tables enhance the information in the previous section in respect of Pillar III.

Breakdown of risk-weighted assets with respect to market risks by approach

EU MR1 – MARKET RISK UNDER THE STANDARDIZED APPROACH

		a	
		12/31/2022	12/31/2021
in millions of euros		Risk-Weighted Assets	Risk-Weighted Assets
	Outright products		
1	Interest rate risk (general and specific)	1,697	2,611
2	Equity risk (general and specific)	393	747
3	Exchange rate risk	4,627	3,604
4	Commodity risk	835	1,666
	Options		
5	Simplified approach	-	-
6	Delta-plus approach	165	172
7	Scenario approach	259	257
8	Securitization	220	514
9	**TOTAL**	**8,195**	**9,571**

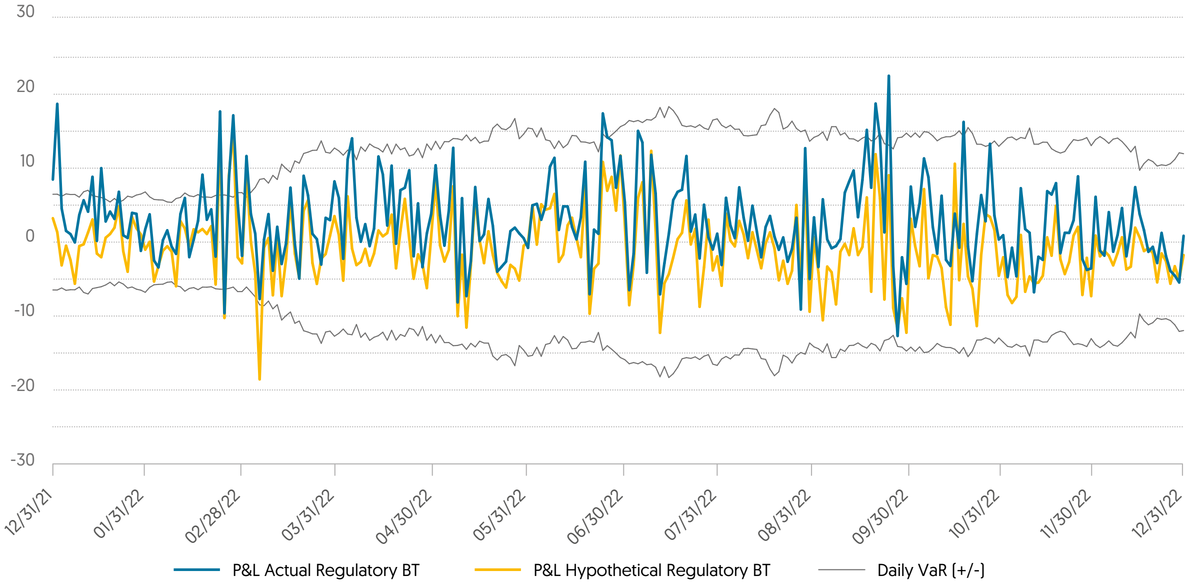
Detailed information on market risks within the Natixis scope

EU MR3 – INTERNAL MODEL APPROACH (IMA) VALUES FOR TRADING BOOKS

		a	
in millions of euros		12/31/2022	12/31/2021
	VAR (10 DAYS 99%)		
1	Maximum value	58	35
2	Average value	39	18
3	Minimum value	17	9
4	Period end	38	21
	SVAR (10 DAYS 99%)		
5	Maximum value	101	77
6	Average value	66	54
7	Minimum value	46	37
8	Period end	63	57
	IRC (99.9%)		
9	Maximum value	37	37
10	Average value	24	18
11	Minimum value	12	12
12	Period end	21	13

EU MR4 – COMPARISON OF VAR ESTIMATES WITH PROFIT/LOSS

The chart below shows the backtesting (*a posteriori* comparison of the potential loss), as calculated *ex-ante* by the VaR (99% 1-day), with the hypothetical results and the actual results observed in profit or loss) on the regulatory scope and enables the robustness of the VaR indicator to be verified:



In 2022, there were one actual backtesting exception and three hypothetical Natixis regulatory level backtesting events.

The three hypothetical backtesting exceptions were recorded on February 9 and 24, then on March 8. The real exception occurred on February 24. These follow the market disruptions observed – tensions generated on the €ster yield curve – during the invasion of Ukraine by the Russian army.

8

EU MR2A – MARKET RISK UNDER THE INTERNAL MODELS APPROACH (IMA)

		12/31/2022	
		a	b
in millions of euros		Risk-Weighted Assets	Capital requirements
1	**VaR (higher of values a and b)**	**2,608**	**209**
a)	Previous day's VaR (VaR t-1)	-	38
b)	Multiplication factor (mc) x average of previous 60 working days (VaRavg)	-	209
2	**SVaR (higher of values a and b)**	**4,135**	**331**
a)	Latest available SVaR (SVaR t-1)	-	63
b)	Multiplication factor (ms) x average of previous 60 working days (SVaRavg)	-	331
3	**IRC (higher of values a and b)**	**427**	**34**
a)	Most recent IRC measure	-	29
b)	12 weeks average IRC measure	-	34
4	**Comprehensive risk measure (higher of values a, b and c)**	**-**	**-**
a)	Most recent risk measure of comprehensive risk measure	-	-
b)	12 weeks average of comprehensive risk measure	-	-
c)	Comprehensive risk measure – Floor	-	-
5	Others	-	-
6	**TOTAL**	**7,170**	**574**

		12/31/2021	
		a	b
in millions of euros		Risk-Weighted Assets	Capital requirements
1	**VaR (higher of values a and b)**	**1,223**	**98**
a)	Previous day's VaR (VaR t-1)	-	23
b)	Multiplication factor (mc) x average of previous 60 working days (VaRavg)	-	98
2	**SVaR (higher of values a and b)**	**4,082**	**327**
a)	Latest available SVaR (SVaR t-1)	-	62
b)	Multiplication factor (ms) x average of previous 60 working days (SVaRavg)	-	327
3	**IRC (higher of values a and b)**	**267**	**21**
a)	Most recent IRC measure	-	19
b)	12 weeks average IRC measure	-	21
4	**Comprehensive risk measure (higher of values a, b and c)**	**-**	**-**
a)	Most recent risk measure of comprehensive risk measure	-	-
b)	12 weeks average of comprehensive risk measure	-	-
c)	Comprehensive risk measure – Floor	-	-
5	Others	-	-
6	**TOTAL**	**5,571**	**446**

EU MR2-B – RWA FLOW STATEMENTS FOR MARKET RISK EXPOSURES UNDER THE INTERNAL MODELS APPROACH (IMA)

		a	b	c	d	e	f	g
in millions of euros		VaR	SVaR	IRC	Overall risk measurement	Others	Total risk-weighted assets	Total capital requirements
1	**Risk-weighted assets at the end of the previous period (06/30/2022)**	**3,020**	**4,761**	**580**			**8,361**	**669**
1a	*Regulatory adjustments*	*(2,426)*	*(3,593)*				*(6,019)*	*(482)*
1b	*Risk-weighted assets at the end of the previous quarter (end of day)*	*594*	*1,168*	*580*			*2,342*	*187*
2	Changes in risk levels	(121)	(375)	(212)			(708)	(57)
3	Model updates/modifications							
4	Methodology and policies							
5	Acquisitions and disposals							
6	Foreign exchange movements							
7	Others							
8a	*Risk-weighted assets at the end of the reporting period (end of day)*	*473*	*793*	*368*			*1,634*	*131*
8b	Regulatory adjustments	2,136	3,342	58			5,536	443
8	**Risk-weighted assets at the end of the reporting period (12/31/2022)**	**2,608**	**4,135**	**427**			**7,170**	**574**

The effects are defined as follows:

Regulatory adjustment: delta between the RWAs used in the calculation of regulatory RWAs and the RWAs calculated on the last day of the period.

Changes in risk levels: changes related to market characteristics.

Model updates/modifications: changes linked to significant modifications of the model following an update of the calculation perimeter, the methodology, the assumptions or the calibration.

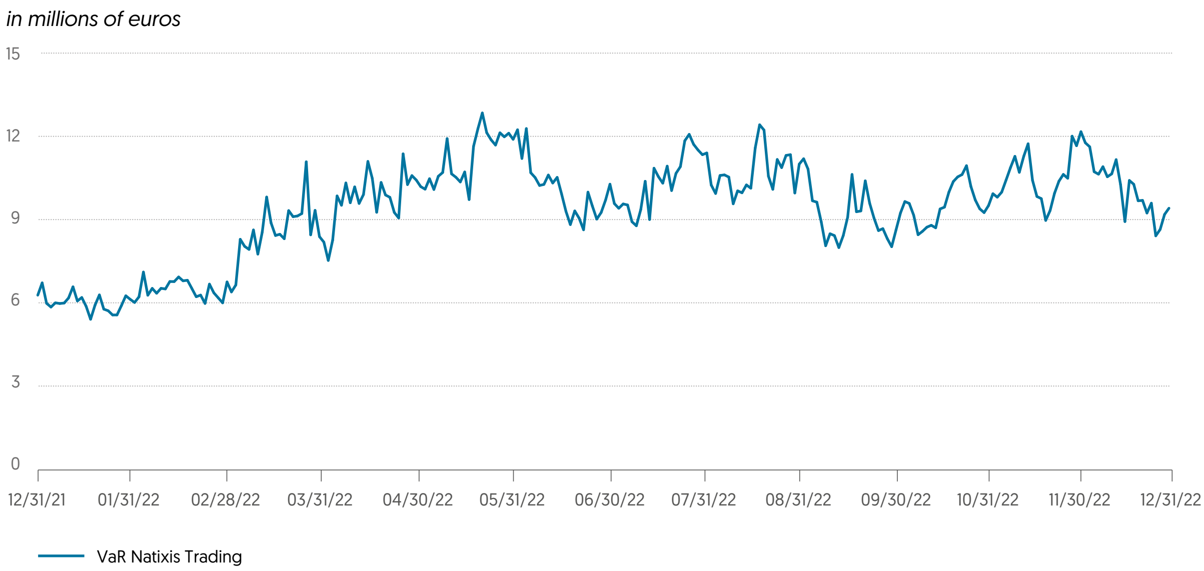
Methodology and policies: changes related to regulatory changes.

Acquisitions and disposals: changes following the purchase or disposal of business lines.

Foreign exchange movements: changes in the foreign exchange risk related to the reversal of the value of the VaR if it were exceptionally expressed in a currency other than the euro, the currency in which the VaR is calculated.

BPCE32 – NATIXIS GLOBAL VAR WITH GUARANTEE – TRADING BOOK [VAR 99% 1-DAY]

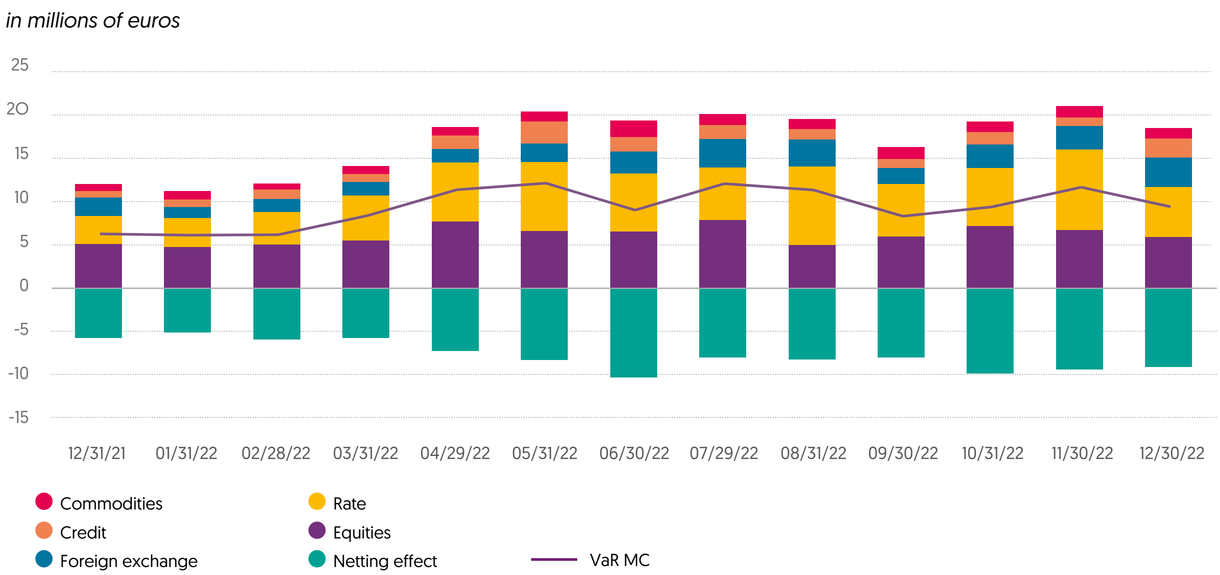
The graph below shows the historical VaR on the trading books between December 31, 2021 and December 30, 2022, for the global scope.



The VaR level of Natixis' trading books averaged €9.4 million, with a minimum of €5.4 million on January 18, 2022, a maximum of €12.8 million on May 25, 2022 and a value of €9.4 million on December 30, 2022.

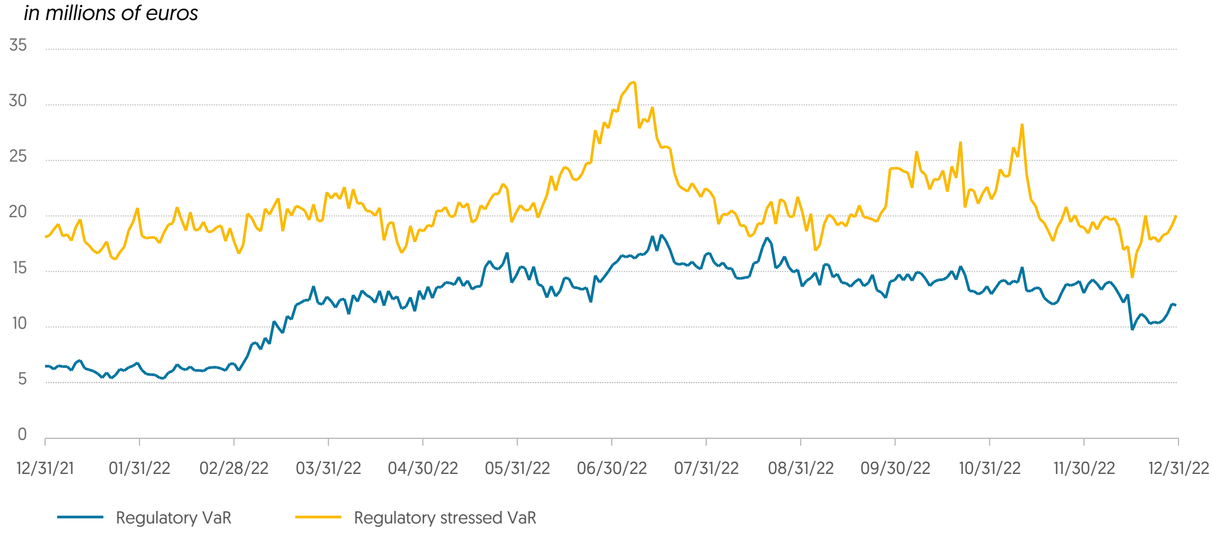
BPCE33 – BREAKDOWN BY RISK CLASS AND NETTING EFFECT

The breakdown of VaR by business line shows the monthly contribution of the main risks as well as the effects of offsetting in VaR.



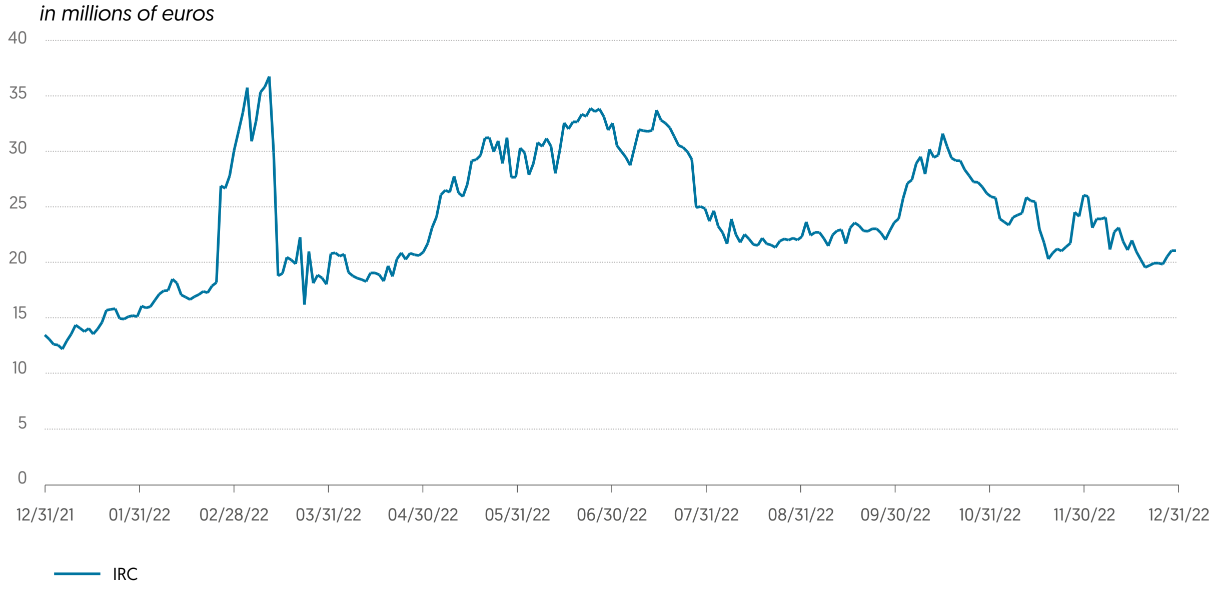
The increase in VaR is linked to the increase in the shocks used, in particular on the interest rate activity.

BPCE34 – NATIXIS STRESSED VAR



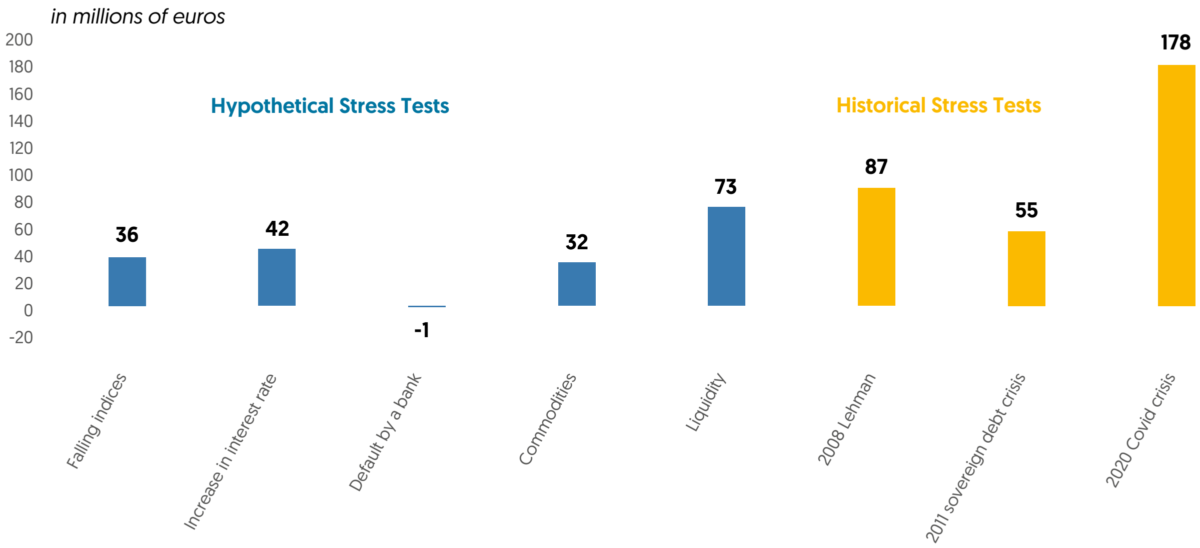
The level of stressed regulatory VaR averaged €20.9 million, with a reported minimum of €14.4 million on December 15, 2022, a maximum of €32 million on July 11, 2022, and a level of €20.1 million on December 30, 2022.

BPCE35 – IRC INDICATOR



This indicator covers the regulatory scope. Natixis' IRC level averaged €23.9 million, with a recorded minimum of €12.2 million on January 6, 2022, a maximum of €36.7 million on March 14, 2022, and a value of €21 million on December 30, 2022.

BPCE36 – RESULTS OF STRESS TESTS ON NATIXIS' SCOPE



The average level of global stress tests at December 30, 2022 was +€63 million, compared with +€25.2 million at December 31, 2021.

The historical stress test reproducing the default of a financial institution leads to the maximum loss (-€1 million at December 30, 2022).

9

LIQUIDITY, INTEREST RATE AND FOREIGN EXCHANGE RISKS

9.1 Governance and structure

Like all credit institutions, Groupe BPCE is exposed to structural liquidity, interest rate and foreign exchange risks.

These risks are closely monitored by the Group and its institutions to secure immediate and future income, balance the balance sheets and promote the Group's development.

Groupe BPCE's Audit Committee and Supervisory Board are consulted on general ALM policy and are informed of major decisions taken regarding liquidity, interest rate and foreign exchange risk management. The implementation of the chosen policy is delegated to the Group Asset/Liability Management Committee.

Each year, Groupe BPCE's Supervisory Board validates the main lines of the ALM policy, *i.e.* the principles of market risk measurements and levels of risk tolerance. It also reviews the risk limit system each year.

Each quarter, Groupe BPCE's Audit Committee is informed of the Group's position through management reports containing the main risk indicators.

The Group Asset/Liability Management Committee, chaired by the Chairman of the BPCE Management Board, is responsible for the operational implementation of the defined policy. It meets every two months and its main duties are as follows:

- determine the Group's general policy on liquidity and transformation risk;
- examine the consolidated view of the structural risks of the Group and its various entities, as well as changes in the balance sheet;
- define the structural risk limits of the Group and the liquidity pools and monitor them (with the approval of the Group Risk division);
- approve the allocation to liquidity pools and the limits;
- monitor liquidity consumption at Group and liquidity pool level;
- approve the Groupe BPCE's global MLT and ST annual refinancing program and monitor it overall;
- approve the investment and allocation criteria as well as the desired overall profile of the Group's liquidity reserve.

The structural liquidity, interest rate and foreign exchange risk management policy is also jointly implemented by the Asset/Liability Management division (oversight of funding plan implementation, management of liquidity reserves, cash management, calculation and monitoring of the various risk indicators) and the Risk division (validation of the control framework, validation of models and agreements, controls of compliance with rules and limits). The Group Financial Management department and the Group Risk division are responsible for adapting this framework to their respective functions.

The adaptation of the operational management framework within each institution is subject to validation by the Board of Directors, the Steering Board and/or the Supervisory Board. Each institution has a special operational committee that oversees implementation of the funding strategy, Asset/Liability management and management of liquidity, interest rate and foreign exchange risks for the institution, in line with rules and limits set at Group level. The Banque Populaire and Caisse d'Epargne networks implement the risk management system using a shared Asset/Liability management tool.

9.2 Liquidity risk management policy

Liquidity risk is defined as the risk of the Group being unable to meet its commitments or to settle or offset a position, due to market conditions factors specific to Groupe BPCE, within a specified period and at a reasonable cost. It reflects the risk of not being able to meet net cash outflows over short- to long-term horizons.

Liquidity risk is assessed differently over the short-, medium- and long-term:

- in the short-term, it involves assessing an institution's ability to withstand a crisis;
- in the medium-term, liquidity is measured in terms of cash requirements;
- in the long-term, it involves monitoring the institution's maturity transformation level.

Liquidity risk is likely to materialize in the event of a decline in sources of financing that could be caused by a massive withdrawal of customer deposits or by problems in executing the annual financing plan following a widespread crisis of confidence on the markets or events specific to the Group. It could also be triggered by an increase in financing requirements due to an increase in drawdowns on loan commitments, an increase in margin calls or a higher collateral requirement.

All liquidity risk factors are accurately mapped, updated annually and presented to the Group Asset/Liability Management Committee. This mapping identifies the various risks as well as their level of materiality, assessed according to various criteria shared between the Asset/Liability management and Risk divisions.

Objectives and policies

The liquidity management policy aims mainly to refinance all of the Group's business lines in an optimal and sustainable manner.

This mandate involves the following duties:

- ensure a sustainable refinancing plan at the best possible price, making it possible to finance the Group's various activities over a period consistent with the assets created;
- distribute this liquidity between the various business lines and monitor its use and changes in liquidity levels;
- comply with regulatory ratios and internal constraints resulting in particular from stress tests guaranteeing the sustainability of the Group's business model refinancing plan, even in the event of a crisis.

To this end, the Group relies on three mechanisms:

- centralized funding management aimed primarily at supervising the use of short-term funding, spreading out the maturity dates of medium- and long-term funds and diversifying sources of liquidity;
- supervision of each business line's liquidity consumption, predominantly by maintaining a balance between growth in the credit segment and customer deposit inflows;
- the creation of liquidity reserves, both in cash and collateral, in line with future liabilities and the targets set for securing the Group's liquidity.

These systems are managed and overseen by way of a consistent set of indicators, limits and management rules are combined in a centralized framework of standards and rules for the Group's institutions, so as to ensure the measurement and consolidated management of liquidity risk.

Operational management of liquidity risk

To keep track of its liquidity risks and define appropriate management and/or corrective actions, the Group has established a reliable, comprehensive and effective internal liquidity management and oversight system including a set of associated indicators and limits. Liquidity risk management and monitoring are carried out at the consolidated Group level and within each of its entities. The definition of these indicators, the calculation methodology and any associated limits are covered in a body of consolidated standards that is reviewed and validated by the decision-making bodies of the Group and its institutions.

LIQUIDITY CONSUMPTION OF THE BUSINESS LINES

The liquidity consumption of the Group's various business lines and within the entities is governed by an internal liquidity allocation system based, on the one hand, on the setting of a target level of short-term, medium-term and long-term market footprint for the Group and, on the other hand, on its distribution among the Group's various entities *via* a liquidity budget system. The Group's market footprint measures its overall dependence to date on bond and money market funding. The sustainability of the Group's market access is measured on a regular basis. The structure of the Group's market footprint (schedule, type of vehicles, currencies, geographic area, investor categories, etc.) is thus closely monitored to ensure that it is not overly dependent on short-term financing and that sources of funds are diversified.

Each entity is required to meet the liquidity budget allocated to it both in terms of actual liquidity consumption and in terms of the projected vision as part of the budget process and the multi-year forecast. This helps to ensure that the market footprint target set by the Group is adequate and to adapt the business line activity projections, if necessary. Moreover, this also makes it possible to adjust the implementation rate of the multi-year funding plan if necessary, based on the needs expressed by the business lines and the Group's capacity to carry out public issues on the market.

The financing needs of the business lines are closely correlated with changes in commercial assets and liabilities (customer loans and deposits) both in terms of the liquidity gap between the average assets and liabilities under management and due to the need for liquidity reserves that it can generate through compliance with the LCR (Liquidity Coverage Ratio).

The liquidity gap resulting from commercial activity is measured using the Customer loan-to-deposit ratio (LTD) at both the consolidated and entity level. This indicator allows a relative measure of the Group's autonomy with regard to the financial markets and monitors changes in the structure of the commercial balance sheet.

RISK INDICATORS

The liquidity risk of the Group and its entities is measured based on regulatory ratios as defined by European regulations, with the LCR (liquidity coverage ratio for short-term liquidity) and the NSFR (Net Stable Funding Ratio for long-term liquidity).

This regulatory approach is complemented by an internal "economic" approach consisting of measuring the liquidity gap over a ten-year horizon. It makes it possible to control the flow of medium and long-term debt and to anticipate the Group's refinancing needs. It is governed by Group and individual entity limits.

The liquidity gap is measured using a so-called static approach, which only takes into account on-balance sheet and off-balance sheet positions to date, and incorporates outflow assumptions for many products. These assumptions are based either on internal modeling (early repayment of loans, closing and deposits on home savings plans or PELs, etc.) or on agreements established for all Group entities (notably for customer deposits with no fixed maturity date, demand deposits and passbook savings accounts). The validation of the models and agreements is based on a process shared between the Asset/Liability management function and the Risk function, which ensures a cross-examination of the relevance of the assumptions used and their suitability with respect to the current limit system.

STRESS SIMULATION AND LIQUIDITY RESERVE

Liquidity crisis simulations are regularly carried out to test the Group's ability to meet its commitments and continue its day-to-day business in a context of crisis. This stress test system aims to become a tool to support management decisions and to measure the Group's resilience over a defined period of time, as well as the relevance of its management system.

Under normal circumstances, these simulations aim to regularly measure exposure to liquidity risks by playing out a set of determined stress scenarios. They make it possible to ensure the correct balance between the Group's liquidity reserve and changes in the net liquidity position under stress, as well as the ability to comply with regulatory requirements.

In a crisis situation, they make it possible to simulate possible changes in the instantaneous liquidity position on the basis of tailor-made scenarios, to identify potential impacts and to define the actions to be taken in the short-term.

The stress calculation methodology is based on the projection of the Group's on-balance sheet and off-balance sheet flows with stressed assumptions defined in the context of stress scenarios and on changes in the liquidity reserve taking into account securities transactions and different valuations (Market, ECB haircuts) according to different scenarios. Thus, for example, we assume that we will only be able to partially renew all maturing refinancing operations, will have to cope with requests for early repayment of deposits or unexpected disbursements on off-balance sheet loan commitments, and will incur a loss of customer deposits or a substantial change in their structure, or a loss of liquidity in certain market assets.

Liquidity stressors are based on different scenarios: idiosyncratic (Group-specific), a systemic crisis affecting all market players, and a combined crisis. Different intensity levels are also used to allow sensitivity analyzes.

LIQUIDITY RISK ASSESSMENT SYSTEMS

The Group's consolidated indicators are produced by the Group ALM department based on indicators produced at the level of each entity. The latter are derived from data collected in the entities' information systems in accordance with a Group organization scheme (data collection, correction and validation process).

A first-level control is carried out by the ALM departments of the entities in conjunction with Group ALM, followed by a second-level control carried out by the Risk departments of the entities and the Group.

CONTINGENT FUNDING SYSTEM (CFP)

The Group's Contingency Funding Plan (CFP) summarizes the work implemented by the Group to facilitate its management of liquidity crisis situations. The document is updated annually. It is based on a monitoring and alert system *via* a dashboard listing Early Warning Indicators (EWI) likely to enlighten the Group as to whether or not the CFP should be activated. These EWIs are produced on a daily basis and mainly concern funding, liquidity gap and liquidity reserve indicators. Market indicators (interest rates, exchange rates, equities, CDS, etc.) are also monitored in this daily dashboard. In addition to these quantitative approaches, a qualitative assessment in the form of a confidence index is provided by the functions responsible for issues, the Treasury and Central Bank Collateral Management team, and the Asset/Liability management and Financial Risk Management teams. The CFP can thus be triggered by a specific market environment that may expose the Group's future liquidity position to increased risks.

During the health crisis of March 2020, and while the Group's liquidity position was solid both from a cash and regulatory perspective, the Group activated its CFP in a preventive manner, in order to ensure that all business lines within the Group were aligned if actions were to be implemented.

The triggering of the CFP generates the establishment of a specific Crisis Management Committee with an escalation process based on the perceived magnitude of the crisis. In addition to this committee, which meets frequently, the CFP centralizes certain financial activities normally located at Natixis with the head of the Treasury and Central Bank Collateral Management team.

The CFP also includes an inventory and an analysis ahead of the financial and business lines that the Group can implement, including potential liquidity gains and the associated costs (loss of profitability) and possible obstacles to their implementation. These levers can be grouped into three categories:

1. liquidity collection. The Group comprises many entities, which allows it to collect liquidity on an *ad hoc* basis;
2. reduction in liquidity consumption. In light of its activities, the Group could, if necessary, reduce the financing it grants to the economy should its liquidity position be stressed;
3. monetization of liquid assets. The Group has significant collateral reserves that can be transformed into cash if necessary.

The knowledge gained from the crisis in the first half of 2020 and the subsequent activation of the CFP were used to update the system in all of these components, namely the EWI system, the committee procedure and the related escalation process, together with the assessment of the various levers.

Centralized funding management

The Financial Management department organizes, coordinates and supervises the funding of Groupe BPCE on the markets.

The short-term funding of Groupe BPCE is carried out by the Single Treasury and Central Bank Collateral Management team, created following the merger of BPCE and Natixis' cash management teams. This integrated treasury team is capable of managing the Group's cash position more efficiently, particularly during a credit crunch.

The Group has access to short-term market funding through its two main issuers: BPCE and its subsidiary Natixis.

For medium- and long-term funding requirements (more than one year), in addition to deposits from customers of the Banque Populaire and Caisse d'Epargne networks, which are the primary source of funding, the Group also issues bonds on the financial markets with BPCE as principal operator, offering the broadest range of bonds to investors:

- directly as BPCE for subordinated debt issues (Additional Tier 1 and Tier 2), senior non-preferred debt and vanilla senior preferred debt issues, in multiple currencies, with the main currencies being the EUR, USD, JPY, AUD and GBP;
- or as BPCE SFH, the Group's main issuer of covered bonds; this issuer, operated by BPCE, specializes in *obligations de financement de l'habitat* (OH), a category of secured bond guaranteed by French legislation (backed by residential home loans in France).
- Groupe BPCE works with two other highly specialized operators to round out its MLT funding sources:
- Natixis for structured senior preferred debt issues (private placements only) under the Natixis name, and for covered bonds under German law (backed by commercial real estate loans) under the Natixis Pfandbriefbank AG name;
- Crédit Foncier for covered bonds, known as *obligations foncières* (OF), under the Compagnie de Financement Foncier (a subsidiary of Crédit Foncier) name; OFs are a category of covered bond based on French legislation (backed by public sector loans and assets, in line with the new positioning decided in 2018 for this Group issuer, bearing in mind that the collateral still includes residential home loans in France previously manufactured by Crédit Foncier).

It should be noted that BPCE is also responsible for the MLT funding activities of Natixis (in addition to the aforementioned structured private placements), which no longer carries out public issues on the markets.

BPCE has short-term funding programs governed by French law (NEU CP), UK law (Euro Commercial Paper) and New York State law (US Commercial Paper), and MLT funding programs governed by French law (EMTN and Neu MTN), New York State law (US MTN), Japanese law (Samurai) and New South Wales law (AUD MTN).

Lastly, the Group is also able to conduct market securitization transactions (ABS), primarily *via* RMBS with residential home loans issued by the Banque Populaire and Caisse d'Epargne networks.

INTERNAL LIQUIDITY PRICING

The centralization of the Group's refinancing involves the implementation of liquidity circulation principles within the Group and the rules for pricing this liquidity so that liquidity can circulate in the best possible way between the Group's entities. The principles are validated by the Group's Asset/Liability Management Committee and implemented by the Group's Treasury and Central Bank Collateral Management team. The system is designed to ensure the transparency and consistency of internal prices, guaranteeing fluid liquidity management between the Group's institutions.

In addition to this internal liquidity pricing system, an internal disposal rate system has been developed so that each of the Group's assets and liabilities can be assigned an internal liquidity price. Here again, the principles are decided by the Group's Asset/Liability Management Committee. The respective changes in the liquidity costs of customer deposits and market resources are taken into account in order to ensure the balanced and profitable development of all activities in the Group's various business lines.

Centralized collateral management

In its liquidity management policy, Groupe BPCE attaches great importance to the management and optimization of its collateral. Non-negotiable debt securities (in particular loans originated by the networks) and negotiable debt securities (financial securities, etc.) that are eligible for a funding arrangement, whether central bank funding (*via* the 3G pool) or Group funding (covered bonds, securitization, etc.) are classified as collateral.

Three key principles are implemented:

- centralized management of the entities' collateral by the central institution in order to improve oversight and operationality of collateral management. For entities with a 3G Pool (Natixis, Compagnie de Financement Foncier, BRED, Crédit Coopératif, Banque Palatine), each entity is responsible for its own collateral. Nonetheless, these entities cannot directly participate in ECB refinancing operations without prior approval from the central institution;
- a definition of investment and management rules by the central institution, with the entities enjoying autonomy in their decision-making in accordance with Group standards;
- a set of indicators relating to the monitoring of collateral determined at Group level and monitored by the Group's Asset/Liability Management Committee.

Collateral management with respect to non-negotiable debt securities is based on a dedicated information system that makes it possible to identify the receivables and identify their eligibility for the various existing arrangements. A significant portion of these receivables is intended to be secured in order to meet the liquidity reserve requirements as set by the Group, particularly with regard to the stress tests conducted periodically.

The unsecured portion is available to carry out funding operations in the market, either in the form of sales of advances or in the form of mobilization of advances. Groupe BPCE has developed a strong expertise in this area, which has enabled it to structure innovative refinancing mechanisms, thus increasing its ability to diversify its sources of fund-raising from investors.

Adequacy of the institution's liquidity risk management systems

The Group continues to focus on improving risk monitoring through a detailed mapping of liquidity risks and on optimizing the tools and procedures to manage the Group's liquidity position and its balance sheet, on a constant basis, in order to be able to cope with new crises, should they occur.

The work carried out with the review of currency management systems, the diversification of short-term financing, the monitoring of intraday risks and stress tests to increase their operationality play an integral part in ensuring that the systems are more appropriate for monitoring and managing Groupe BPCE's liquidity risks.

To support the strengthening of the various systems, numerous IT projects aimed at improving the quality of the Group's production have been carried out with the launch of a new ALM management tool and a strengthened capacity to project indicators over time. Significant investments were also launched as part of the management of the Group's collateral with a view to industrializing and securing structured and specialized transactions and ultimately meeting the ambitions of ensuring greater diversification of the Group's refinancing.

9.3 Quantitative disclosures

BPCE37 – LIQUIDITY RESERVES

in billions of euros	12/31/2022	12/31/2021
Cash placed with central banks	165	181
LCR securities	57	41
Assets eligible for central bank funding	101	107
TOTAL	**322**	**329**

At December 31, 2022, the liquidity reserves covered 150% of the short-term funding and short-term maturities of MLT debt (€215 billion at December 31, 2022) compared to 247% at December 31, 2021 (ST and MLT maturities of €133 billion).

The decrease in the coverage ratio is partly due to the repayments of TLTRO 3 occurring during the year 2023.

The change in the liquidity reserve during 2022 reflects the Group's liquidity management policy with the desire to maintain a high level of hedging of its liquidity risk.

BPCE38 – LIQUIDITY GAP

in billions of euros	01/01/2023 to 12/31/2023	01/01/2024 to 12/31/2026	01/01/2027 to 12/31/2030
Liquidity gap	44.6	10.0	16.9

The projected liquidity position shows a structural liquidity surplus over the analysis horizon. Compared to the end of 2021, this surplus was down by €58.8 billion over a one-year horizon, by €44.2 billion over the two-to-four-year horizon and €24.3 billion over the five-to-eight-year horizon.

Over the short-term horizon, this change is partly due to the effect of reducing the residual maturity of TLTRO 3 drawdowns. Over the medium-term horizon, the decrease in the liquidity surplus reflects the increase in the customer gap in the Commercial Banking networks, as also illustrated by the change in the customer loan-to-deposit ratio.

Customer loan-to-deposit ratio

At December 31, 2022, the Group's customer loan-to-deposit ratio amounted to 122%, compared to 120% at December 31, 2021.

BPCE39 – SOURCES AND USES OF FUNDS BY MATURITY

in millions of euros	Less than 1 month	From 1 month to 3 months	From 3 months at 1 year	From 1 year to 5 years	More than 5 years	Not determined	Total at 12/31/2022
Cash and amounts due from central banks	170,929	86				304	171,318
Financial assets at fair value through profit or loss						192,751	192,751
Financial assets at fair value through other comprehensive income	20,033	804	2,889	10,034	7,464	3,059	44,284
Hedging derivatives						12,700	12,700
Securities at amortized cost	745	345	3,697	8,134	13,907	822	27,650
Loans and advances to banks at amortized cost	89,429	4,548	512	2,423	47	735	97,694
Loans and advances to customers at amortized cost	77,360	23,217	64,738	252,406	387,787	21,444	826,953
Revaluation difference on interest rate risk-hedged portfolios, assets						(6,845)	(6,845)
Financial assets by maturity	**358,496**	**29,001**	**71,836**	**272,997**	**409,206**	**224,968**	**1,366,504**
Central banks	9						9
Financial liabilities at fair value through profit or loss	8,916	97	433	1,411	13,499	160,391	184,747
Hedging derivatives						16,286	16,286
Debt securities	35,340	24,836	43,078	78,224	69,982	(8,088)	243,373
Amounts due to banks and similar	29,750	6,376	73,841	19,694	9,433	24	139,117
Amounts due to customers	552,292	17,123	31,212	56,906	6,874	29,564	693,970
Subordinated debt	678	12	2,547	8,419	8,437	(1,161)	18,932
Revaluation differences on interest rate risk-hedged portfolios						389	389
Financial liabilities by maturity	**626,985**	**48,443**	**151,111**	**164,654**	**108,224**	**197,406**	**1,296,823**
Loan commitments given to banks	204	35	5	449	107	2	801
Loan commitments given to customers	27,015	7,100	22,136	63,182	21,700	18,626	159,758
TOTAL LOAN COMMITMENTS GIVEN	**27,220**	**7,134**	**22,140**	**63,631**	**21,807**	**18,628**	**160,560**
Guarantee commitments given to banks	1,194	648	1,062	534	2,371	2,025	7,834
Guarantee commitments given to customers	4,330	5,546	9,497	15,354	10,502	2,415	47,644
TOTAL GUARANTEE COMMITMENTS GIVEN	**5,524**	**6,194**	**10,560**	**15,888**	**12,873**	**4,440**	**55,478**

in millions of euros	Less than 1 month	From 1 month to 3 months	From 3 months at 1 year	From 1 year to 5 years	More than 5 years	Not determined	Total at 12/31/2021
Cash and amounts due from central banks	54,203	131,942				172	186,317
Financial assets at fair value through profit or loss						198,919	198,919
Financial assets at fair value through other comprehensive income	2,064	821	3,865	18,977	17,805	5,066	48,598
Hedging derivatives						7,163	7,163
Securities at amortized cost	659	361	1,211	8,177	12,140	2,439	24,986
Loans and advances to banks at amortized cost	83,699	4,898	3,942	806	226	568	94,140
Loans and advances to customers at amortized cost	41,455	23,244	68,270	264,909	374,422	8,798	781,097
Revaluation difference on interest rate risk-hedged portfolios, assets						5,394	5,394
Financial assets by maturity	**182,080**	**161,266**	**77,288**	**292,869**	**404,591**	**228,519**	**1,346,614**
Central banks		6					6
Financial liabilities at fair value through profit or loss	7,168	100	389	1,333	14,728	168,050	191,768
Hedging derivatives						12,521	12,521
Debt securities	28,834	30,254	37,864	73,343	63,143	3,981	237,419
Amounts due to banks and similar	26,350	9,825	5,683	101,071	9,598	2,864	155,391
Amounts due to customers	553,167	15,506	20,457	63,401	10,019	2,766	665,317
Subordinated debt	591	11	3	9,895	7,589	901	18,990
Revaluation differences on interest rate risk-hedged portfolios						184	184
Financial liabilities by maturity	**616,111**	**55,702**	**64,396**	**249,043**	**105,077**	**191,267**	**1,281,596**
Loan commitments given to banks	8	98	378	816	128		1,428
Loan commitments given to customers	33,523	7,730	24,526	61,324	21,746	5,559	154,408
TOTAL LOAN COMMITMENTS GIVEN	**33,530**	**7,828**	**24,904**	**62,141**	**21,874**	**5,559**	**155,837**
Guarantee commitments given to banks	1,570	704	1,375	196	1,891	2,706	8,443
Guarantee commitments given to customers	2,818	5,004	5,997	17,185	9,051	2,675	42,731
TOTAL GUARANTEE COMMITMENTS GIVEN	**4,389**	**5,708**	**7,372**	**17,381**	**10,942**	**5,381**	**51,173**

Financial instruments marked to market on the income statement and held in the trading book, variable-income available-for-sale financial assets, non-performing loans, hedging derivatives and revaluation differences on interest rate risk-hedged portfolios are placed in the "No fixed maturity" column. These financial instruments are:

- either held for sale or redeemed prior to their contractual maturity;
- or held for sale or redeemed at an indeterminable date (particularly where they have no contractual maturity);
- or measured on the balance sheet for an amount impacted by revaluation effects.

Accrued interest not yet due is shown in the "Less than 1 month" column.

The amounts shown are contractual amounts excluding projected interest.

Technical provisions of insurance companies, which, for the most part are equivalent to demand deposits, are not shown in the Table above.

9

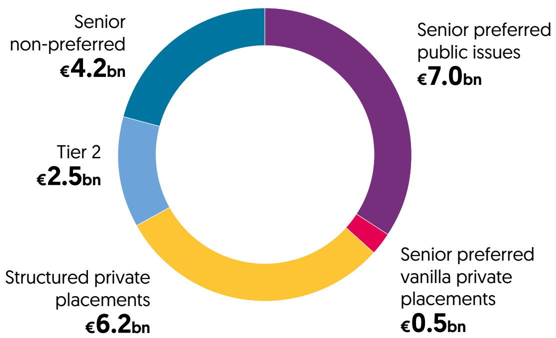
Funding strategy and conditions in 2022

One of the Group's priorities in terms of medium- and long-term funding in the financial markets is to ensure that sources of funding are properly diversified, in terms of types of investors, types of debt instruments, countries and currencies.

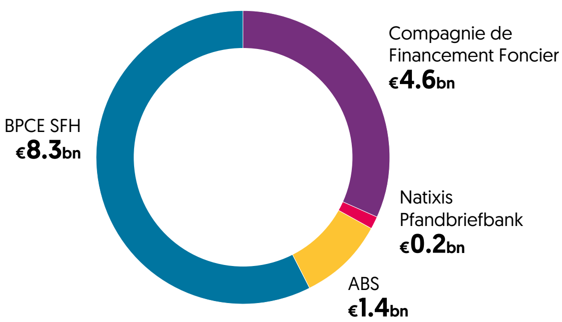
Under the 2022 wholesale MLT funding plan, in 2022 Groupe BPCE raised a total of €33.5 billion in the bond market, of which €27.3 billion excluding structured private placements; public issues made up 78% of this amount and private placements 22%.

In addition, the Group raised €1.4 billion in ABS in the financial market.

UNSECURED BOND SEGMENT: €20.4 BILLION



SECURED BOND SEGMENT: €14.5 BILLION



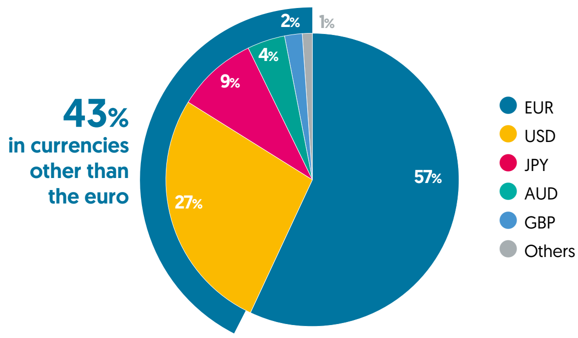
In 2022, the amount raised in the unsecured bond segment, excluding structured private placements, was €14.2 billion, of which €2.5 billion in Tier 2, €4.2 billion in the form of senior non-preferred debt and €7.5 billion in the form of senior preferred debt. In addition, €6.2 billion were raised in structured private placements.

In the secured funding segment excluding ABS, the amount raised was €13.1 billion in covered bonds. In addition, €1.4 billion were raised in the form of ABS (mainly RMBS backed by residential mortgage loans granted by the Banque Populaire and Caisse d'Epargne networks).

The unsecured bond segment (Tier 2 + senior non-preferred + senior preferred) accounted for 58% of funding raised, and the secured funding segment 42% (38% covered bonds and 4% ABS).

The breakdown by currency of unsecured issues excluding completed structured private placements is a good indicator of the diversification of the Group's medium- and long-term funding sources. In all, 43% were issued in currencies other than the euro in 2022; the four largest currencies were USD (27%), JPY (9%), AUD (4%), and GBP (2%).

DIVERSIFICATION OF INVESTOR BASE



The average maturity at issuance (including abs) for Groupe BPCE as a whole was 6.7 years in 2022, compared with an average maturity of 8.2 years in 2021.

The vast majority of medium- and long-term funding raised in 2022 was at a fixed rate, as in previous years. In general, fixed rate is swapped into floating rate in accordance with the Group's interest rate risk management policy.

NEW SOLUTIONS TO MEET THE NEW PRIORITIES OF INVESTORS: "SUSTAINABLE DEVELOPMENT" BONDS

Groupe BPCE carried out three social/green public bond issues or RMBS in 2022 for a total of €1.9 billion:

- in January 2022, BPCE became the first European issuer of a green bond dedicated to sustainable agriculture: this was a 6NC5 senior non-preferred public issue for €750 million;
- in May 2022, public issue by BPCE SFH of 10-year green covered bonds (Green Building type) in euros for an amount of €1 billion;
- in July 2022, BPCE became the leading bank issuer of a green bond on the Japanese market: this was a public issue dedicated to sustainable agriculture 7NC6 senior non-preferred in the amount of 14.9 billion yen, i.e. €105 million.

9.4 Management of structural interest rate risk

Objectives and policies

Structural interest rate risk (or overall interest rate risk) is defined as the risk incurred in the event of a change in interest rates due to all balance sheet and off-balance sheet transactions, except for – if applicable – transactions subject to market risks. Structural interest rate risk is an intrinsic component of the business and profitability of credit institutions.

The objective of the Group's interest rate risk management system is to monitor each institution's maturity transformation level in order to contribute to the growth of the Group and the business lines while evening out the impact of any unfavorable interest rate changes on the value of the Group's banking books and future income.

Interest rate risk oversight and management system

Structural interest rate risk is controlled by a system of indicators and limits set by the Group Asset/Liability Management Committee. It measures structural interest rate risk on the balance sheet, excluding any kind of independent risk (trading, own accounts, etc.). The indicators used are divided into two approaches: a static approach that only takes into account on-balance sheet and off-balance sheet positions at a set date and a dynamic approach which includes commercial and financial forecasts. They can be classified into two sets:

- gap indicators, which compare the amount of liability exposures against asset exposures on the same interest rate index and over different maturities. These indicators are used to validate the main balance sheet aggregates to ensure the sustainability of the financial results achieved. Gaps are calculated on the basis of contractual maturities, the results of common behavioral models for different credit or collection products, outflow agreements for products with no maturity date, and specific agreements for regulated rates;
- sensitivity indicators, both in terms of value and revenues. Value-based indicators measure the change in the net present value of equity in the light of interest rate shocks applied to the static balance sheet. In addition to the Basel II regulatory indicator (SOT: standard outlier test), which measures sensitivity to interest rate shocks of +/-200 basis points, the Group has introduced an internal Economic Value of Equity (EVE) indicator. Revenue-based indicators measure the sensitivity of the projected net interest income where there are differences between the change in the market interest rate and the central scenario established quarterly by the Group's economists. This net interest income sensitivity indicator covers all commercial banking activities and aims to estimate the sensitivity of the institutions' results to interest rate fluctuations.

The dynamic approach in terms of sensitivity of future revenues has been strengthened by a multi-scenario vision allowing a broader approach by taking into account the uncertainties related to business forecasts (new activity and changes in customer behavior), to possible changes. commercial margin, etc. Internal stress tests are carried out periodically to measure changes in the bank's earnings trajectory in adverse scenarios.

The interest rate position of the Group's institutions is managed in compliance with the Group's standards, which formalize both the indicators monitored and the associated limits, as well as the instruments authorized for hedging interest rate risk. These are strictly "vanilla" (unstructured), option sales are excluded and accounting methods with no impact on the Group's consolidated income are preferred.

Quantitative disclosures

The interest rate position is mainly driven by Retail Banking and Insurance, and primarily by the networks. Measured using a static approach to interest rate gaps, it shows a structural risk exposure to an increase in interest rates with a surplus of fixed-rate assets compared to fixed-rate resources. This structural surplus is due in particular to the percentage of customer deposits at regulated or similar rates (in particular the Livret A rate).

The interest rate gaps at the end of 2022, presented below, show a significant change compared to the previous year with an increase in the application surplus over a one-year horizon as well as over the periods beyond one year. This change is linked to an increase in the structural transformation position due to the production of fixed-rate loans but also to the inclusion of an optional portion materializing the higher risk of arbitrage of customer deposits in a context of sharp rise in rates.

BPCE 40 – INTEREST RATE GAP

in billions of euros	01/01/2023 to 12/31/2023	01/01/2024 to 12/31/2026	01/01/2027 to 12/31/2030
Interest rate gap (fixed-rate*)	(83.0)	(84.3)	(72.0)

* The indicator takes into account all asset and liability positions and floating-rate positions until the next interest rate reset date.

SENSITIVITY INDICATORS

The sensitivity of the net present value of the Group's balance sheet to a +/-200 bps variation in interest rates remained lower than the 15% Tier 1 limit. At December 31, 2022, Groupe BPCE's sensitivity to interest rate increases stood at -13.94% compared to Tier 1 *versus* -11.37% at December 31, 2021. This indicator, calculated according to a static approach (contractual or conventional flow of all balance sheet items) and in a stress scenario (immediate and significant interest rate shock), makes it possible to highlight the distortion of the balance sheet. a long horizon. This measurement is closely correlated with the measurement of interest rate gaps detailed above.

To better control the Group's exposure to interest rate risk, it must be supplemented by a dynamic approach (including new production forecasts). This is achieved by measuring the change in the Group's forecast net interest margin at one year according to four scenarios (rise in rates, fall in rates, steepening of the yield curve, flattening of the yield curve) compared to the core scenario. As of September 30, 2022, a small upward shock (+25 bps) would have a negative impact of 1.4% on the projected net interest margin (expected loss of €91 million) over a rolling year, whereas the small downward scenario (-25 bps) would have a positive impact of 1.5% (expected gain of €95 million).

EU IRRBB1 – SENSITIVITY OF THE ECONOMIC VALUE OF TIER 1 CAPITAL

		a	b
		EVE sensitivity (in %)	
Regulatory scenarios		**12/31/2022**	**12/31/2021**
1	Shock: Parallel up	(13.94%)	(11.37%)
2	Shock: Parallel down	4.36%	0.41%
3	Steepener	(2.00%)	(1.33%)
4	Flattener	3.03%	5.34%
5	Short rates up	(1.36%)	4.85%
6	Short rates down	1.80%	1.08%

FINANCIAL INSTRUMENTS SUBJECT TO BENCHMARK INDEX REFORM

The table below presents the financial instruments for each index that must transition within the framework of the index reform. Since January 1, 2022, risks are mainly confined to the transition from the LIBOR USD index (for overnight, one, three, six and twelve-month maturities) to the SOFR rate (see Section 5.16).

The data presented are taken from the management databases at December 31, 2022 after elimination of internal transactions with Groupe BPCE and concern financial instruments with a maturity exceeding June 30, 2023, taking into account the following conventions:

Financial assets and liabilities excluding derivatives are presented based on their nominal amount (past due principal), excluding provisions;

Repurchase agreements are broken down before accounting offsetting;

Derivatives are presented based on their notional amount at December 31, 2022;

For derivatives with a receiving and a paying leg exposed to a reference rate, both legs were reported in the table below to accurately reflect Groupe BPCE's exposure to the reference rate for those two legs.

BPCE41 – OUTSTANDING AMOUNTS OF FINANCIAL INSTRUMENTS SUBJECT TO BENCHMARK INDEX REFORM

	12/31/2022		
in millions of euros	**Financial assets**	**Financial liabilities**	**Derivatives (notional)**
LIBOR – USD	9,451	2,788	2,578,866

9.5 Management of structural exchange rate risk

Structural foreign exchange risk is defined as the risk of a realized or unrealized loss due to an unfavorable fluctuation in foreign currency exchange rates. The management system distinguishes between the structural exchange risk policy and the management of operational foreign exchange risk.

Foreign exchange risk oversight and management system

For Groupe BPCE (excluding Natixis), foreign exchange risk is monitored using regulatory indicators (measuring corresponding capital adequacy requirements by entity). The residual foreign exchange positions held by the Group (excluding Natixis) are not material because virtually all foreign currency assets and liabilities are match-funded in the same currency.

As regards international trade financing transactions, risk-taking is limited to counterparties in countries with freely-translatable currencies, provided that translation can be technically carried out by the technically managed by the entity's information system.

Natixis' structural exchange rate positions on net investments in foreign operations funded with currency forwards are tracked on a quarterly basis by its Asset/Liability Management Committee in terms of sensitivity as well as solvency. The resulting risk indicators are submitted to the Group Asset/Liability Management Committee on a quarterly basis.

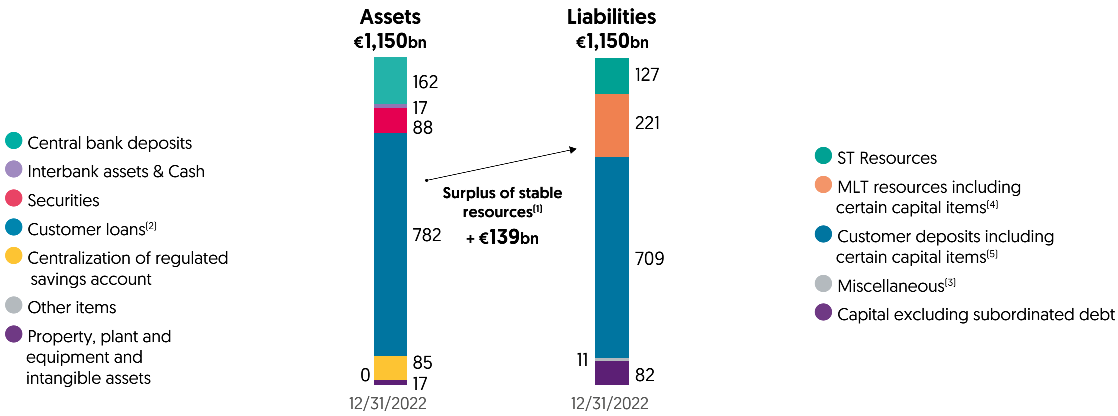
Quantitative disclosures

At December 31, 2022, Groupe BPCE, subject to regulatory capital requirements for foreign exchange risk, recorded a stable foreign exchange position of €4,739 million *versus* €3,708 million at the end of 2021, with €379 million for foreign exchange risk. The foreign exchange position is mainly carried by GFS.

9.6 Detailed quantitative disclosures on liquidity risk

The detailed quantitative disclosures on liquidity risk in the following tables enhance the information in the previous section under Pillar III.

GROUPE BPCE CASH BALANCE SHEET OUTSIDE SCF



The cash balance sheet of Groupe BPCE excluding the contribution of the SCF shows the main items of the balance sheet by identifying in particular:

- the business financing requirements (customer loans, centralization of regulated passbook savings accounts and the Group's tangible and intangible assets) for a total of €883 billion at December 31, 2022, up by €50 billion year-on-year mainly due to the increase in loans outstanding (real estate loans);
- the Group's stable resources consisting of customer deposits, medium- and long-term resources, and equity and similar assets, for a total of €1,023 billion as of December 31, 2022, up by €24 billion over one year, mainly due to the increase in customer deposits;
- the €139 billion surplus reflects the surplus of customer deposits and medium- and long-term financial resources over the financing needs of the customer business. It is mainly invested in liquid assets to contribute to the liquidity reserve;
- the short-term resources invested mainly in liquid assets (central bank deposits, interbank assets, debt securities).

LIQUIDITY/FINANCING NEEDS

BASEL RATIOS: LIQUIDITY COVERAGE RATIO (LCR)

The regulatory 30-day liquidity ratio measures the ratio between the liquidity buffer (HQLA – High Quality Liquid Assets) and the expected net cash outflows over a 30-day period. Since January 1, 2018, the minimum requirement level has been set at 100%.

The Group's LCR stood at an average monthly rate of 142% for the year 2022, *i.e.* a liquidity surplus of €65 billion in December 2022, compared with levels of 161% and €86 billion respectively in December 2021.

(1) Balance of stable resources of €139 billion at 12/31/2022 = MLT resources of €221 billion + customer deposits of €709 billion + capital excluding subordinated debt of €82 billion + miscellaneous €11 billion - customer loans of €782 billion - regulated passbook savings centralization of €85 billion + fixed assets of €17 billion.
(2) Including financing of Group SPT customer loans by SCF.
(3) Net position of accrual accounts and other liabilities and refinancing transactions with the SCF : €11 billion on the liabilities side for the Group excluding SCF.
(4) Of which €21 billion, excluding accrued interest, of market MLT resources with a residual maturity date of less than or equal to one year.
(5) Of which €1.5 billion (excluding accrued interest) of BPCE's preferred senior bond issues (with €0.1 billion maturing in one year or less) and €2.2 billion (excluding accrued interest) of BPCE's Tier 2 issues (with no issues maturing in one year or less) marketed in our networks.

EU LIQ1 – LIQUIDITY COVERAGE RATIO (LCR)

		a	b	c	d	e	f	g	h
in millions of euros		Total unweighted value (average)				Total weighted value (average)			
EU 1a	**Quarter ending on (MM DD YYYY)**	**03/31/2022**	**06/30/2022**	**09/30/2022**	**12/31/2022**	**03/31/2022**	**06/30/2022**	**09/30/2022**	**12/31/2022**
EU 1b	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
	HIGH QUALITY LIQUID ASSETS (HQLA)								
1	**Total High Quality Liquid Assets (HQLA)**					**231,216**	**228,372**	**223,352**	**220,931**
	CASH OUTFLOWS								
2	Retail deposits and deposits from small business customers, of which:	379,933	383,427	386,214	388,030	22,522	22,771	22,967	23,058
3	Stable deposits	290,633	292,696	294,596	295,702	14,535	14,635	14,730	14,785
4	Less stable deposits	79,834	81,329	82,345	82,680	7,987	8,136	8,238	8,273
5	Unsecured deposits of corporates and financial institutions, including	199,908	202,096	204,478	207,023	102,446	103,164	104,015	105,359
6	Operational deposits	52,539	52,810	52,499	52,043	12,204	12,264	12,178	12,043
7	Non-operational deposits	131,636	133,940	136,912	139,873	74,509	75,554	76,770	78,208
8	Unsecured debt	15,733	15,346	15,067	15,108	15,733	15,346	15,067	15,108
9	Secured deposits of corporates and financial institutions					25,811	26,608	26,956	26,982
10	Additional outflows, including:	110,962	112,927	115,083	116,568	28,277	28,980	30,410	32,020
11	Outflows related to derivative exposures and other collateral requirements	15,373	15,552	15,822	16,091	11,243	11,645	12,567	13,720
12	Outflows related to loss of funding on debt products	0	0	0	0	0	0	0	0
13	Credit and liquidity facilities	95,589	97,375	99,260	100,477	17,035	17,335	17,843	18,300
14	Other contractual funding obligations	30,769	34,464	36,026	35,953	29,490	33,411	34,975	34,931
15	Other contingent funding obligations	119,205	124,921	127,307	128,685	12,902	13,324	13,741	13,942
16	**Total cash outflows**					**208,098**	**207,984**	**233,065**	**236,292**
	CASH INFLOWS								
17	Transactions collateralized by securities (*i.e.* reverse repos)	95,735	99,490	105,171	106,277	12,778	13,328	14,197	14,956
18	Cash inflows from loans	29,294	30,547	31,535	31,630	22,417	23,575	24,526	24,467
19	Other cash inflows	52,636	54,015	53,890	52,630	39,377	41,416	41,867	40,966
EU-19a	(Difference between total weighted cash inflows and total weighted cash outflows resulting from transactions in third countries subject to transfer restrictions or denominated in non-convertible currencies)					0	0	0	0
EU-19b	(Surplus inflows from a related specialized credit institution)					0	0	0	0
20	**TOTAL CASH INFLOWS**	**177,665**	**184,052**	**190,595**	**190,537**	**74,572**	**78,318**	**80,591**	**80,389**
EU-20a	Cash inflows fully exempt from cap	0	0	0	0	0	0	0	0
EU-20b	Cash inflows subject to the 90% cap	0	0	0	0	0	0	0	0
EU-20c	Cash inflows subject to the 75% cap	147,071	155,470	161,401	159,945	74,572	78,318	80,591	80,389
	TOTAL ADJUSTED VALUE								
21	**TOTAL HQLA**					**231,216**	**228,372**	**223,352**	**220,931**
22	**TOTAL NET CASH OUTFLOWS**					**146,876**	**149,940**	**152,474**	**155,903**
23	**SHORT-TERM LIQUIDITY RATIO** *(IN %)*					**158%**	**152%**	**147%**	**142%**

The Group's liquid assets, after taking into account regulatory haircuts, amounted to €221 billion and consisted largely of central bank deposits and sovereign securities.

The gross cash outflows amounted to €236 billion, growing in both 2021 and 2022, in line with the increase in customer deposits, both Retail and Wholesale. On the other hand, the gross cash inflows amounted to €80 billion and were up compared to December 2021. In net position, cash outflows thus amounted to €156 billion, an increase of €13 billion compared to December 2021.

The liquid asset position is managed in such a way as to retain a sufficient amount of excess liquidity to cover any volatility in the evolution of the LCR ratio and also to protect the Group against a short-term liquidity crisis that may prevent the Group from renewing all or part of its short-term issues. In this context, the excess liquidity will be absorbed first without impacting the Group's core activities.

BASEL RATIOS: NET STABLE FUNDING RATIO (NSFR)

The net stable funding ratio (NSFR) corresponds to the amount of available stable funding (*i.e.* own funds and the proportion of liabilities assumed to be reliable over the time horizon taken into account for the purposes of the NSFR, *i.e.* up to one year) compared to the required stable funding. This ratio is restrictive, with a minimum requirement level of 100% since June 28, 2021.

The Group's NSFR stood at 106.27% as of December 31, 2022, *i.e.* a liquidity surplus of €48.9 billion.

EU LIQ2 – NET STABLE FUNDING RATIO (NSFR)

		12/31/2022				
		a	b	c	d	e
		Unweighted value by residual maturity				
in millions of euros		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	Weighted value
	AVAILABLE STABLE FUNDING (ASF) ITEMS					
1	**Capital items and instruments**	**79,765**	**0**	**0**	**14,372**	**94,137**
2	*Capital*	79,765	0	0	14,372	94,137
3	*Other capital instruments*		0	0	0	0
4	**Retail deposits**		**394,336**	**805**	**14,700**	**385,951**
5	*Stable deposits*		312,109	385	2,684	299,553
6	*Less stable deposits*		82,226	420	12,017	86,398
7	**Wholesale funding:**		**482,034**	**46,400**	**192,873**	**315,618**
8	*Operational deposits*		50,234	0	0	2,277
9	*Other wholesale funding*		431,799	46,400	192,873	313,342
10	**Interdependent liabilities**		**7,912**	**0**	**76,766**	**0**
11	**Other commitments:**	**4,796**	**42,510**	**3,202**	**31,669**	**33,270**
12	*NSFR derivative liabilities*	4,796				
13	*All other liabilities and capital instruments not included in the above categories*		42,510	3,202	31,669	33,270
14	**Total available stable funding (ASF)**					**828,977**
	REQUIRED STABLE FUNDING (RSF) ITEMS					
15	**Total High Quality Liquid Assets (HQLA)**					**16,096**
EU-15a	**Assets encumbered for more than one year in cover pool**		**39**	**3,955**	**42,668**	**39,662**
16	**Deposits held at other financial institutions for operational purposes**		**388**	**0**	**0**	**194**
17	**Performing loans and securities:**		**140,809**	**47,896**	**730,159**	**632,142**
18	*Performing securities financing transactions with financial customers collateralized by Level 1 HQLA subject to 0% haircut*		18,013	2,796	2,386	4,307
19	*Performing securities financing transactions with financial customer collateralized by other assets and loans and advances to financial institutions*		51,185	4,151	23,355	29,227
20	*Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:*		52,019	29,802	426,492	564,449
21	*With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk*		8,430	7,581	159,422	300,072
22	*Performing residential mortgages, of which:*		11,333	10,246	239,923	0
23	*With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk*		11,333	10,246	239,923	0
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		8,292	1,146	41,255	37,160
25	**Interdependent assets**		**7,912**	**0**	**76,766**	**0**

		12/31/2022				
		a	b	c	d	e
		Unweighted value by residual maturity				
in millions of euros		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	Weighted value
26	**Other assets:**	**0**	**57,499**	**386**	**71,753**	**73,444**
27	*Physical traded commodities*				0	0
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*		479	0	7,316	6,626
29	*NSFR derivative assets*		1,065			0
30	*NSFR derivative liabilities before deduction of variation margin posted*		42,439			2,122
31	*All other assets not included in the above categories*		13,516	386	64,437	64,697
32	**Off-balance sheet items**		**280,524**	**0**	**28,608**	**18,548**
33	**Total RSF**					**780,086**
34	**Net Stable Funding Ratio (in %)**					**106%**

		12/31/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				
in millions of euros		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	Weighted value
	AVAILABLE STABLE FUNDING (ASF) ITEMS					
1	**Capital items and instruments**	**77,859**	**0**	**0**	**12,951**	**90,810**
2	*Capital*	77,859	0	0	12,951	90,810
3	*Other capital instruments*		0	0	0	0
4	**Retail deposits**		**385,390**	**621**	**13,923**	**376,598**
5	*Stable deposits*		304,947	354	3,277	293,313
6	*Less stable deposits*		80,443	268	10,646	83,286
7	**Wholesale funding:**		**428,483**	**29,738**	**255,944**	**364,447**
8	*Operational deposits*		87,674	0	0	3,535
9	*Other wholesale funding*		340,808	29,738	255,944	360,912
10	**Interdependent liabilities**		**6,638**	**0**	**69,672**	**0**
11	**Other commitments:**	**453**	**25,165**	**1,116**	**42,910**	**43,468**
12	*NSFR derivative liabilities*	453				
13	*All other liabilities and capital instruments not included in the above categories*		25,165	1,116	42,910	43,468
14	**Total available stable funding (ASF)**					**875,323**
	REQUIRED STABLE FUNDING (RSF) ITEMS					
15	**Total High Quality Liquid Assets (HQLA)**					**22,608**
EU-15a	**Assets encumbered for more than one year in cover pool**		**1,452**	**1,585**	**40,950**	**37,389**
16	**Deposits held at other financial institutions for operational purposes**		**325**	**-**	**-**	**163**
17	**Performing loans and securities:**		**121,074**	**45,875**	**689,551**	**611,739**
18	*Performing securities financing transactions with financial customers collateralized by Level 1 HQLA subject to 0% haircut*		14,388	957	2,654	3,714
19	*Performing securities financing transactions with financial customer collateralized by other assets and loans and advances to financial institutions*		39,476	5,349	15,846	20,804

		12/31/2021				
		a	b	c	d	e
		Unweighted value by residual maturity				
	in millions of euros	No maturity	< 6 months	6 months to < 1 year	≥ 1 year	Weighted value
20	*Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:*		49,053	29,021	409,473	544,983
21	*With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk*		7 450	6,867	152,178	274,816
22	*Performing residential mortgages, of which:*		10,177	9,368	214,660	-
23	*With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk*		10,177	9,368	214,660	-
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		7,980	1,180	46,919	42,237
25	**Interdependent assets**		**6,638**	**-**	**69,672**	**-**
26	**Other assets:**	**0**	**43,677**	**1,297**	**73,230**	**79,029**
27	*Physical traded commodities*				-	-
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*		57	-	5,086	4,372
29	*NSFR derivative assets*		3,036			2,583
30	*NSFR derivative liabilities before deduction of variation margin posted*		24,623			1,231
31	*All other assets not included in the above categories*		15,962	1,297	68,143	70,844
32	**Off-balance sheet items**		**117,757**	**-**	**339 179**	**5,742**
33	**Total RSF**					**756,669**
34	**Net Stable Funding Ratio (in %)**					**116%**

In addition to the structural effects – combining deposit taking and loan production – which result in the production of a natural NSFR surplus for Groupe BPCE, cyclical effects including the increase in loans, the amortization of the TLTRO III and the review of the treatment of off-balance sheet items covered by Article 23 of the delegated act explains the level of surplus posted at December 31, 2022.

The amount of available stable funding for Groupe BPCE thus amounts to €828.98 billion and mainly consists of:

- customer deposits (€386 billion), including a significant portion of deposits deemed stable, and increasing slightly since June 2022 reflecting the high levels of savings recorded over the period, and
- wholesale financing (€316 billion), including corporate deposits, down compared to June 2022, in the current context of TLTRO III repayment.

The amount of required stable funding stands at €780 billion, the result of a significant level of performing loans and securities whose impact was €632 billion.

ENCUMBERED AND UNENCUMBERED ASSETS (ASSET ENCUMBRANCE)

EU AE1 – ENCUMBERED AND UNENCUMBERED ASSETS

		12/31/2022							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
in millions of euros		10	30	40	50	60	80	90	100
010	**Assets of the reporting institution**	**320,806**	**72,724**			**1,072,536**	**20,560**		
030	Equity instruments	21,616	18,454	21,616	18,454	17,941	5,964	13,006	5,939
040	Debt securities	84,851	54,270	83,477	54,277	14,361	14,361	33,484	28,213
050	of which: covered bonds	256	4	263	4	720	720	1,258	1,075
060	of which: securitization	23,534	0	22,357	0	0	0	0	0
070	of which: issued by general governments	45,552	44,675	45,558	44,682	10,545	10,545	17,166	16,361
080	of which: issued by financial corporations	13,139	7,626	12,950	7,626	3,232	3,232	6,277	6,277
090	of which: issued by non-financial corporations	4,148	2,019	4,149	1,983	0	0	9,304	4,647
120	Other assets	214,522	0			1,035,043	0		

		12/31/2021							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
in millions of euros		010	030	040	050	060	080	090	100
010	**Assets of the reporting institution**	**334,073**	**72,938**			**1,036,947**	**28,255**		
030	Equity instruments	28,321	25,474	28,321	25,474	22,108	5,824	18,098	5,848
040	Debt securities	83,384	47,619	82,921	47,564	24,026	23,188	37,637	31,798
050	of which: covered bonds	368	185	372	185	1,256	1,073	1,279	1,098
060	of which: securitization	19,429	0	19,101	0	0	0	0	0
070	of which: issued by general governments	44,263	41,815	44,140	41,752	17,740	17,032	20,156	19,626
080	of which: issued by financial corporations	14,630	4,033	14,562	4,034	4,959	4,959	5,176	5,140
090	of which: issued by non-financial corporations	3,009	1,648	3,011	1,654	0	0	10,575	5,949
120	Other assets	221,369	0			990,812	0		

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EU AE2 – COLLATERAL RECEIVED

		12/31/2022			
				Unencumbered	
		Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued that may be encumbered	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
in millions of euros		010	030	040	060
130	Collateral received by the reporting institution	137,449	109,321	91,268	46,931
140	Loans on demand	0	0	0	0
150	Equity instruments	34,854	18,283	21,687	5,910
160	Debt securities	102,595	92,190	47,542	41,570
170	of which: covered bonds	162	5	866	866
180	of which: securitization	0	0	0	0
190	of which: issued by general governments	76,151	76,045	29,334	28,342
200	of which: issued by financial corporations	23,354	14,986	11,530	11,530
210	of which: issued by non-financial corporations	2,939	824	6,370	1,982
220	Loans and advances other than loans on demand	0	0	21,980	0
230	**Other collateral received**	**0**	**0**	**0**	**0**
240	**Own debt securities issued other than own covered bonds or securitizations**	**0**	**0**	**0**	**0**
241	**Own covered bonds and asset-backed securities issued and not yet pledged**			**9**	**0**
250	**TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED**	**464,521**	**186,005**		

		12/31/2021			
				Unencumbered	
		Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued that may be encumbered	
			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA
in millions of euros		010	030	040	060
130	Collateral received by the reporting institution	132,900	96,218	94,895	48,445
140	Loans on demand	0	0	0	0
150	Equity instruments	39,703	17,519	26,108	4,963
160	Debt securities	94,574	79,976	47,459	43,482
170	of which: covered bonds	581	366	1,484	1,484
180	of which: securitization	4,652	0	0	0
190	of which: issued by general governments	73,051	70,843	34,697	34,300
200	of which: issued by financial corporations	13,058	6,143	6,547	6,547
210	of which: issued by non-financial corporations	1,341	408	4,707	1,485
220	Loans and advances other than loans on demand	0	0	20,710	0
230	**Other collateral received**	**0**	**0**	**0**	**0**
240	**Own debt securities issued other than own covered bonds or securitizations**	**0**	**0**	**0**	**0**
241	**Own covered bonds and asset-backed securities issued and not yet pledged**			**400**	**0**
250	**TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED**	**464,722**	**170,859**		

EU AE3 – SOURCES OF ENCUMBRANCE

		12/31/2022	
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitizations encumbered
in millions of euros		010	030
010	**Carrying amount of selected financial liabilities**	**300,819**	**365,134**

		12/31/2021	
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitizations encumbered
in millions of euros		010	030
010	**Carrying amount of selected financial liabilities**	**321,351**	**373,252**

An asset or a guarantee is encumbered when it is capitalized as a guarantee, collateral or enhancement of an institution's transaction.

For example,

- the following are considered to be encumbered:
  - cash posted as collateral,
  - assets used as collateral for covered bonds,
  - margin calls (cash) paid;
- the following are not considered as encumbered:
  - assets transferred to the Central Bank but not mobilized,
  - assets underlying self-owned securitizations.

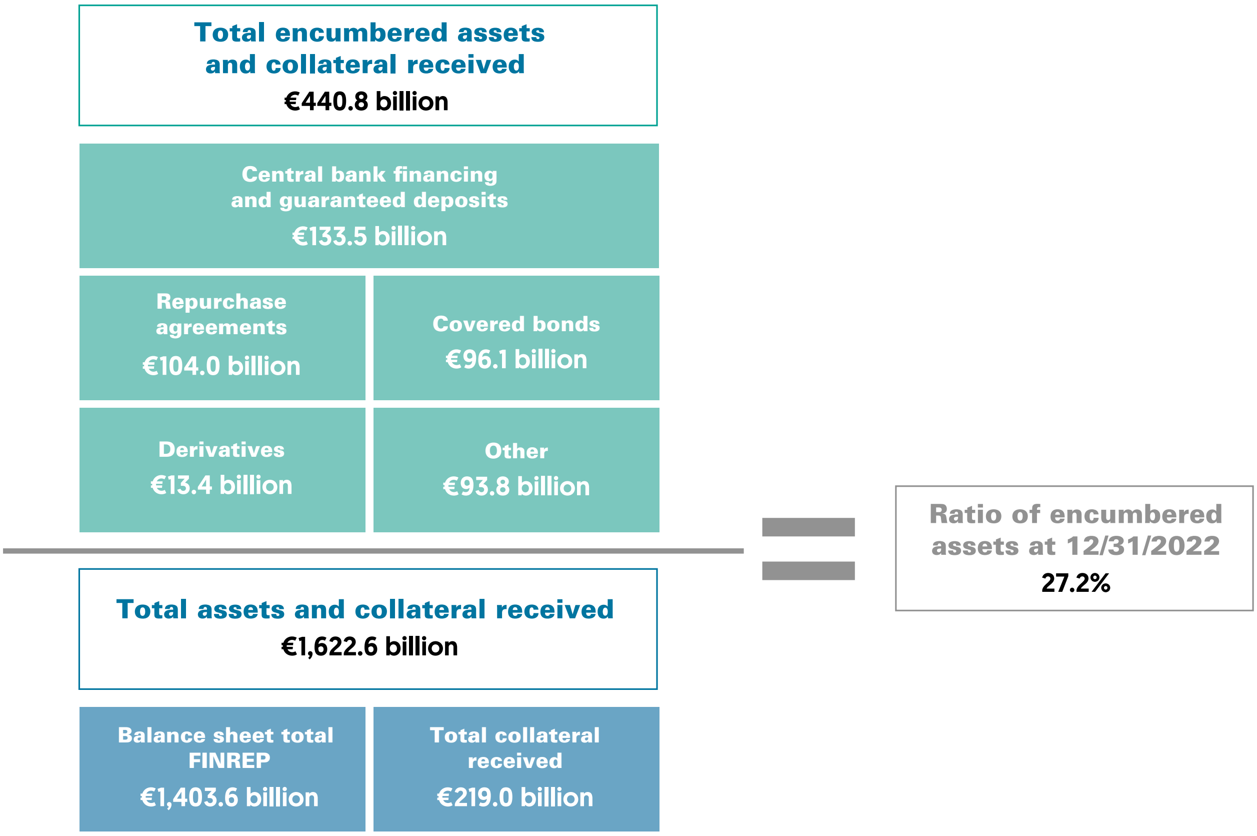
At the closing date of December 31, 2022, the ratio of encumbered assets to assets on the Group's balance sheet was 27.2%, up by 2.0% compared to the ratio at December 31, 2021 (29.2%).

Total encumbrances on assets (encumbered assets and collateral) amount to €440.8 billion.

The Group uses its assets and collateral to obtain financing on favorable terms and to carry out repurchase agreements and derivative transactions.

As of December 31, 2022, the main encumbrances were:

- refinancing activities of the Group's institutions, which involve:
  - €96.1 billion in loans and advances to guarantee covered bonds issued by BPCE SFH, SCF and Natixis Pfandbriefbank. The over-collateralization rates applied are respectively 105% for BPCE SFH/SCF and 102% for Natixis Pfandbriefbank,
  - €133.5 billion in advances and securities mobilized at the Central Bank to carry out TLTRO transactions. The Group's central institution manages the 3G pooling system on behalf of the institutions;
- €197.8 billion in securities encumbered for repurchase agreements/securities lending purposes and €13.4 billion in encumbered assets for derivatives (including margin calls). These transactions are mainly carried out by GFS.


Total encumbered assets and collateral received
€440.8 billion
Central bank financing and guaranteed deposits
€133.5 billion
Repurchase agreements
€104.0 billion
Covered bonds
€96.1 billion
Derivatives
€13.4 billion
Other
€93.8 billion
Total assets and collateral received
€1,622.6 billion
Balance sheet total FINREP
€1,403.6 billion
Total collateral received
€219.0 billion
Ratio of encumbered assets at 12/31/2022
27.2%

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LEGAL RISKS

10.1 Legal and arbitration proceedings – BPCE

Check imaging exchange commissions

Marketplace antitrust case initially involving Banques Populaires Participations (BP Participations) and Caisses d'Epargne Participations (CE Participations) and BPCE since it merged with and absorbed BP Participations and CE Participations.

On March 18, 2008, BFBP and CNCE received, as was the case for other banks on the marketplace, a notice of grievance from the French anti-trust authority. The banks are accused of having established and mutually agreed on the amount of the check imaging exchange commission, as well as related check commissions.

The anti-trust authority delivered its decision on September 20, 2010 to fine the banks found guilty (€90.9 million for BPCE). These banks (except for the Banque de France) lodged an appeal.

On February 23, 2012, the Paris Court of Appeals overruled the anti-trust authority's decision and the €90.9 million fine paid by BPCE was refunded.

On March 23, 2012, the anti-trust authority launched an appeal of the Court of Appeals' ruling.

On the referral of the anti-trust authority, on April 14, 2015, the Court of Cassation overturned the Court of Appeals' 2012 ruling due to breach of procedure. The banks were once again required to pay the fine.

BPCE, along with the other accused banks, referred this ruling to the Paris Court of Appeals, requesting that it purge this breach of procedure and uphold its 2012 decision, ensuring that BPCE will ultimately be reimbursed.

The Second Court of Appeals ruled on December 21, 2017 and confirmed the 2010 analysis of the anti-trust authority, thus contradicting the initial decision by the Paris Court of Appeals in 2012.

The Court considered that the introduction of the EIC commission and CSCs constitute anti-competitive practice in its nature and upheld the conviction to pay the fine set by the ADLC. However, the Court reduced the amount of Caisse d'Epargne's fine by €4.07 million, by canceling the 10% increase to the fine imposed by ADLC on certain banks for their key roles in negotiations. BPCE, standing in for CE Participations, should retrieve this amount of €4.07 million from the Treasury.

On January 22, 2018, the banks filed an appeal with the Court of Cassation.

On January 29, 2020, the Court of Cassation rendered its verdict and overturned the appeal for lack of legal grounds on the demonstration of collusion. The ruling referred the case back to the Court of Appeal, with the banks returning to their position subsequent to the ruling of the *Autorité de la concurrence* (ADLC), the French competition authority.

The Court of Appeal of Reference issued its decision on December 2, 2021 and reformed almost the entirety of the decision of the Competition Authority of 2010 sanctioning 11 banks and canceled the €384.9 million of fines imposed on the banks.

This ruling on remand after a second cassation (ruling of January 29, 2020), allowed BPCE SA to recover on December 30, 2021 the total sum of €90,962,647.35 (corresponding to the €38.09 million for the BPs and €48.74 million for the CEs), as well as the additional €4 million paid by BPCE SA to the French Treasury in April 2020 (corresponding to the reimbursement of the reduction in the CEs' fine pronounced by the appeal ruling of December 21, 2017).

In its decision, the Court of Appeal found that the introduction, at the time of the transition to dematerialization of check processing, of interbank commissions for the exchange of check images (CEIC) and for related services on the cancellation of wrongly cleared transactions (AOCT), did not distort competition either by its object or by its effects. As to the anti-competitive object of the agreement, according to the Court, in the absence of experience with this type of compensatory and dissuasive fee, it cannot be considered that by their very nature they are sufficiently harmful to competition to be qualified as a restriction of competition by object. As to the effects of the agreement, the Court considers that it has not been established that CEIC has had any real effects on the prices of the check remittance service, and therefore, that it has effectively constrained the banks in their pricing policy. The Paris Court of Appeal therefore concluded that none of the grievances notified to the Banks were well-founded and, consequently, ruled that it had not been established that the introduction, by the agreement of February 3, 2000, of the disputed interbank commissions and the collection of these commissions as of January 1, 2002 infringed the provisions of Article 101 TFEU and Article L. 420-1 of the French Commercial Code.

On December 31, 2021, the Chairman of the French Competition Authority filed an appeal in cassation against the judgment of the Court of Appeal of December 2, 2021. The case is ongoing.

French Competition Authority / Bimpli

On October 9, 2015, a company operating in the meal voucher industry lodged a complaint with the French Competition Authority (Autorité de la Concurrence) to contest industry practices with respect to the issuance and acceptance of meal vouchers. The complaint targeted several French companies operating in the meal voucher industry, including Natixis Intertitres, which became Bimpli in 2022.

In its decision of December 17, 2019, the French Competition Authority ruled that Natixis Intertitres had exchanged information and been a part of a practice designed to keep new entrants out of the meal voucher market. Natixis Intertitres was fined €4,360,000 in its own right, along with two other fines totaling €78,962,000, jointly and severally with Natixis.

Natixis Intertitres has appealed against this decision and believes it has strong arguments to challenge it. Under these conditions, no provisions were made in the financial statements at December 31, 2019, or at subsequent closing dates.

Since December 14, 2022, following the alliance between Groupe BPCE and Swile, Bimpli has been owned by a third party outside the Group.

10.2 Legal and arbitration proceedings – Natixis

Like many banking groups, Natixis and its consolidated subsidiaries are subject to legal and tax proceedings and investigations by the supervisory authorities.

The financial consequences, assessed as of December 31, 2022, of those likely to have, or which have had in the recent past, a significant impact on the financial position of Natixis and/or Natixis and its consolidated subsidiaries taken as a whole, their profitability or activity, have been included in Natixis' consolidated financial statements.

The most significant legal and arbitration proceedings are described below, it being specified that their inclusion in the list below does not mean that these proceedings will necessarily have any impact on Natixis and/or its consolidated subsidiaries. Other proceedings, including tax proceedings, have no significant impact on the financial position or profitability of Natixis and/or Natixis and its consolidated subsidiaries taken as a whole, or are not at a sufficiently advanced stage to determine whether they are likely to have such an impact.

Madoff fraud

The Madoff outstandings are estimated at €339.7 million in equivalent value at December 31, 2022, fully provisioned at this date, compared to €346.8 million at June 30, 2022, following the confirmation of the liquidation of certain assets deposited in the name of Natixis and fully provisioned. The effective impact of this exposure will depend on both the extent of recovery of assets invested for Natixis and the outcome of the measures taken by the bank, notably in terms of legal proceedings. Furthermore, in 2011 a dispute emerged over the application of the insurance policy for professional liability in this case, which had been taken out with successive insurers for a total amount of €123 million. In November 2016, the Paris Court of Appeal vindicated the Commercial Court's prior ruling that primary insurers were liable to cover the losses incurred by Natixis due to the Madoff fraud, up to the amount for which the bank was insured. On September 19, 2018, the Court of Cassation subsequently annulled the judgment under appeal and referred the case back to the Paris Court of Appeal with a differently constituted bench. On September 24, 2019, the Court ruled against Natixis, overturning the ruling by the Commercial Court of Paris. Natixis filed an appeal with the Court of Cassation in December 2019.

Irving H. Picard, the court-appointed trustee for Bernard L. Madoff Investment Securities LLC (BMIS), submitted a restitution claim concerning the liquidation of amounts received prior to the discovery of the fraud through a complaint filed with the United States Bankruptcy Court for the Southern District of New York against several banking institutions, including a $400 million claim against Natixis. Natixis denies the allegations made against it and has taken the necessary steps to defend its position and protect its rights. Natixis has launched appeals, including a motion to dismiss the case on a preliminary basis, or prior to any ruling on the merits, and a motion to withdraw the reference to transfer certain matters to the United States district court. These proceedings have been subject to numerous rulings and appeals and are still ongoing. A November 2016 ruling by the bankruptcy court dismissed a number of restitution claims initiated by the trustee on the grounds of extraterritoriality. In September 2017, the Second Circuit Court granted the BMIS liquidator and the defendants the right to appeal the bankruptcy court's ruling on the grounds of extraterritoriality directly through the Second Circuit, thereby avoiding the need to file an intermediary appeal with the district court. In February 2019, the Court of Appeals for the Second Circuit overturned the bankruptcy court's extraterritoriality ruling. In August 2019, Natixis joined the group of defendants that filed a request for permission to appeal the Second Circuit Court's ruling before the Supreme Court. In June 2020, the Supreme Court refused to hear the case. The case will be referred by the Second Circuit court to the bankruptcy court. The liquidator of BMIS seeks the suspension of the pending restitution actions until certain specific actions dealing with the concept of "good faith" in the restitution requests are settled.

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Furthermore, the liquidators of Fairfield Sentry Limited and Fairfield Sigma Limited have initiated a large number of proceedings against investors having previously received payments from these funds for redemptions of shares (over 200 proceedings have been filed in New York). Some Natixis entities have been named as defendants in some of these proceedings. Natixis deems these proceedings to be entirely unfounded and is vigorously defending its position. These proceedings have been suspended for several years, and in October 2016 the bankruptcy court authorized the liquidators to modify their initial claim. The defendants filed joint responses in May and June 2017. In August 2018, the bankruptcy court ruled on a motion to dismiss filed by the defendants (requesting that the case be dismissed on a preliminary basis and prior to any ruling on the merits). The judge only gave a ruling on one of the merits (that of personal jurisdiction), having found that the latter was missing from the claim made against the defendants. In December 2018, the judge ruled on the motion to dismiss, rejecting the liquidators' common law claims (unjust enrichment, money had and received, mistaken payment and constructive trust) as well as contractual claims. However, it overturned the motion to dismiss in respect of claim founded on British Virgin Islands' law, while reserving the right to file a plea for the application of Section 546(e) safe harbor provision. In May 2019, the liquidators appealed the bankruptcy court's ruling before the District Court. The defendants, including Natixis, submitted on March 9, 2020 a motion to dismiss this appeal and renewed this initial motion on March 16, 2020. The bankruptcy court asked the defendants to limit the motion to dismiss to arguments that can lead to the dismissal of all the actions of the liquidators (as per Section 546(e) of the safe harbor provision or impropriety of the initial petition). In December 2020, the bankruptcy court dismissed the action brought under the law of the British Virgin Islands, considering that the defendants, including Natixis, are covered by Section 546(e) safe harbor. This decision, which may result in the rejection of claw back requests, is subject to appeal.

The case is ongoing.

Criminal complaint coordinated by ADAM

In March 2009, the Paris public prosecutor's office (Parquet de Paris) launched a preliminary investigation into a complaint filed by Natixis minority shareholders and coordinated by the Association de Défense des Actionnaires Minoritaires (ADAM – Association for the Defense of Minority shareholders). As the plaintiffs have initiated civil proceedings, a judicial investigation opened in 2010. On February 14, 2017, Natixis came under investigation for false and misleading information on account of two messages sent in the second half of 2007, at the beginning of the subprime crisis.

After judicial investigation, a committal for trial was ordered on June 28, 2019.

The committal concerns only one of the messages, disseminated on November 25, 2007, explaining the risks to which Natixis was exposed at the time as a result of the subprime crisis. The second message was dismissed.

The Paris Criminal Court, in a judgment handed down on June 24, 2021, condemned Natixis, deeming insufficient the information provided by said press release of November 25, 2007, and more specifically the risks to which the bank was exposed at the time due to the subprime crisis.

It imposed a fine of €7.5 million. The civil parties were awarded total compensation of around €2 million.

Natixis, which considers that it has not committed any offense, appealed against this judgment, as the Paris Criminal Court did not take into account the arguments presented at the hearing.

Lucchini Spa

In March 2018, Natixis SA was summoned, jointly and severally with other banks, by Lucchini Spa (under extraordinary administration) to appear before the Court of Milan, with alleging improprieties in the implementation of the loan restructuring agreement granted to Lucchini Spa. The case is ongoing.

In its decision of July 21, 2020, the Court of Milan dismissed all Lucchini Spa's claims and sentenced it to pay the costs of the proceedings for a total amount of €1.2 million, of which €174,000 for each bank or group of banks. Lucchini Spa has appealed the judgment. The case is ongoing.

Competition Authority/Natixis

On October 9, 2015, a company operating in the meal voucher industry lodged a complaint with the Competition Authority *(Autorité de la concurrence)* to contest industry practices with respect to the issuance and acceptance of meal vouchers. The complaint targeted several French companies operating in the meal voucher industry, including Natixis Intertitres, then attached to Natixis.

In its decision of December 17, 2019, the Competition Authority ruled that Natixis Intertitres had participated in a practice covering the exchange of information and a practice designed to keep new entrants out of the meal voucher market.

Natixis Intertitres was subject to a fine in its own right, along with two other fines totaling €78,962,000, jointly and severally with Natixis.

Natixis has appealed against this decision and believes that it has strong arguments to challenge it.

Bucephalus Capital Limited/Darius Capital Conseil

On June 7, 2019, Bucephalus Capital Limited (a UK law firm), together with other firms, brought claims against Darius Capital Partners (a French law firm, now operating under the name Darius Capital Conseil, a 70%-held subsidiary of Natixis Investment Managers) before the Paris Commercial Court, to contest the alleged breach of various contractual obligations, particularly with respect to a framework agreement dated September 5, 2013 setting out their contractual relations and various subsequent agreements. Bucephalus Capital Limited claims a total of €178,487,500.

Darius Capital Conseil consider these claims to be unfounded. The case is ongoing.

10.3 Dependency

BPCE is not dependent upon any specific patents, licenses, industrial procurement contracts, or commercial or financial agreements.

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NON-COMPLIANCE AND SECURITY RISKS

In accordance with the legal and regulatory requirements mentioned above, and with the professional standards and control charters governing Groupe BPCE, the functions managing compliance risk are organized as part of the internal control system of all Groupe BPCE institutions and subsidiaries as a whole.

The Group Compliance division, which reports to the Groupe BPCE Corporate Secretary's Office, performs its duties independently of the operational departments and the other Internal Control departments with which it collaborates.

The Compliance division, "Compliance Verification function" defined by the EBA and included in the Ministerial Order of Nov 3, 2014, amended by the Ministerial Order of Feb 25, 2021, is responsible for the prevention, detection, measurement and monitoring of non-compliance risks to ensure their control.

The Group Compliance division carries out its duties within the framework of business line operations.

It helps guide, motivate, manage and control the Heads of the Compliance function of the affiliates and subsidiaries. The compliance officers appointed within the different Group entities, including the Banque Populaire and Caisse d'Epargne banks and direct subsidiaries covered by the regulatory system of banking and financial supervision, are functionally subordinate to the Compliance division.

The Group Compliance division carries out all actions designed to strengthen the compliance of products, services and marketing processes, customer protection, compliance with ethical rules, the fight against money laundering and the financing of terrorism, the fight against market abuse, the monitoring of transactions and compliance with sanctions and embargoes. It monitors compliance risks throughout the Group. As such, it builds and revises the standards proposed for the governance of Groupe BPCE, shares best practices and coordinates working groups consisting of departmental representatives.

The dissemination of the culture of non-compliance risk and consideration of the legitimate interests of customers is also reflected in the training of employees in the sector and the awareness-raising of other BPCE departments.

Accordingly, the Group Compliance division:

- draws up the Group's non-compliance risk management systems (risk mapping and DMR) and supervises the permanent control system relating to non-compliance risks;
- prepares internal risk prevention reports for executives and decision-making bodies and for the central body;
- determines and validates, in conjunction with HR, the content of training materials intended for the Compliance function;
- helps train Compliance staff, mainly through specialized annual seminars (financial security, compliance, ethics, coordination of permanent compliance controls, etc.);
- coordinates the training of Directors/Heads of Compliance through a dedicated system;
- leads the Compliance function of the institutions through national days;
- draws on the expertise of the Compliance functions of Group institutions *via* theme-based working groups, in particular to develop and implement compliance standards.

In addition, BPCE SA Compliance reports to Group Compliance, which also manages and supervises the Compliance of entities in the Financial Services and Expertise division, the Payments division and the Insurance division and the other subsidiaries reporting to BPCE, including BPCE International.

11.1 Compliance

Organization

The Group Compliance division includes the following areas of expertise:

- Banking compliance and non-life insurance;
- Financial Savings Compliance Ethics;
- Financial Security in charge of AML/CFT (Anti-Money Laundering and Combating the Financing of Terrorism), compliance with sanctions and embargo measures, anti-corruption and internal fraud;
- Steering and Coordination.

Compliance is organized as follows:	**Bancassurance Compliance** contributes to the prevention of risks of non-compliance with regulations and professional standards in the scope of banking and non-life insurance activities. As such, it supports the operational sectors in the development and dissemination of standards (including ACPR recommendations and EBA guidelines) and in bringing their processes into compliance with regulatory changes. Bancassurance Compliance also studies the launch of new products and participates in the validation of commercial processes and documents. Lastly, it supports and leads the Compliance department on all these subjects, and contributes to the development of training modules for Group employees. **Financial Savings Compliance and Ethics** covers the compliance and ethics of financial activities as defined by the General Regulation of the *Autorité des marchés financiers* (AMF), the French financial markets authority, as well as the prevention of risks of non-compliance in legislative and regulatory areas in the life insurance and foresight scope. Within the aforementioned scope, this division is responsible for implementing the applicable regulations and carries out missions related in particular to the approval of products and services, the validation of commercial materials, the training of employees and the prevention of conflicts of interest, while safeguarding the customer's interests and ensuring compliance with market rules and professional standards in banking and finance, together with internal rules and regulations on ethics. It also includes oversight of investment services and the operating procedures of investment services compliance officers (RCSIs). Since the end of 2016, investment services compliance has also included SRAB commitments (Separation and Regulation of Banking Activities) – Volcker office. It supports, coordinates and supervises the Compliance function of the Group's entities in this area. Lastly, since 2021, it has been in charge of the Group Ethics system. **Financial Security** covers activities related to anti-money laundering and counter-terrorism financing (AML/CFT), international financial sanctions, embargoes and asset freezes, and anti-corruption measures. It supports and coordinates the Compliance function on all these topics, updating the reference documentation in compliance with regulatory changes in AML/CFT, national and international financial embargoes, and anti-corruption measures. **Steering and Cross-functional Coordination** covers the coordination of the Compliance functions, and the centralization of relations with regulators, supervisors and the Group Inspection Générale in compliance matters. Drawing on the expertise of the Bancassurance Compliance and Financial Savings Compliance divisions, it manages the mapping of compliance risks, supervises reporting systems and works on cross-functional projects with the aim of improving the control of compliance risks by Groupe BPCE institutions.

1. Measurement and supervision of non-compliance risk	2. Product governance and supervision
Non-compliance risks are analyzed, measured, monitored and managed in accordance with the Ministerial Order of November 3, 2014 (amended February 25, 2021), with the aim of: • ensuring a permanent overview of these risks and the associated risk prevention and mitigation system, including updated identification under the new non-compliance risk-mapping exercise; • ensuring that the largest risks, if necessary, are subject to controls and action plans aimed at supervising them more effectively. • Groupe BPCE manages non-compliance risk by mapping out its non-compliance risks and implementing mandatory Level 1 and 2 compliance controls common to all Group retail banking institutions. • The impact of non-compliance risk was calibrated and measured with the Group's operational risk teams, using the methodology of operational risk tool OSIRISK, covering the risk management systems established by the institutions aimed at reducing gross risk levels.	• All new products and services, regardless of their distribution channels, as well as sales materials that fall within the Compliance function's remit, are reviewed by Compliance beforehand. The purpose of this review is to ensure that applicable regulatory requirements are met and that targeted customers – and the public at large – receive clear and fair information. Product supervision is carefully conducted over the entire product life cycle. • Compliance also coordinates the approval of national sales challenges, ensures that conflicts of interest are managed properly and guarantees that customer interests always come first. • Compliance is careful to ensure that sales procedures, processes and policies guarantee that the rules of compliance and ethics are observed at all times for all customer segments, and in particular that the advice given to customers is appropriate to their needs.

Several regulatory projects were carried out in 2022

- Regulatory Know Your Customer (KYC) with the continuation of the program implemented in 2019 to strengthen the completeness and compliance of regulatory KYC files. In 2022, the program focused on developing the updating of KYC through online banking. Work was also carried out to deploy the automation of events requiring updating as well as the preparation of actions to update KYC files (criteria, customer targeting, communication kits, reports).
- Strengthening of the banking inclusion system with the tightening of the deadlines for implementing the right to account procedure, in accordance with the new provisions of the Decree of March 11, 2022. The tracing and archiving of waiver letters pertaining to the specific offer for vulnerable customers or to the offer of free basic banking services has also been strengthened through the development of an IT solution that automatically archives letters if the customer wishes to subscribe to another offer.
- Implementation of new provisions for fairer, simpler and more transparent access to the loan insurance market (the Lemoine Act) of February 28, 2022 with, in particular, the termination at any time, the strengthening of customer information, the elimination of the health questionnaire under certain conditions, and the extension of the right to be forgotten in terms of aggravated health risks.
- Implementation of the control of eligibility for the LEP savings account *via* the electronic questioning of the tax authorities provided for by Decree No. 2021-277 of March 12, 2021 on the control of the holding of regulated savings products. The eligibility verification processes were reviewed as part of the LEP account subscription and the annual control.
- Implementation of the multi-holding control measures for regulated savings products provided for by Decree No. 2021-277 of March 12, 2021 on the control of the holding of regulated savings products, which will come into force no later than January 1, 2024.
- Launch of the Sustainable Finance project (Taxonomy, SFDR, incorporation of ESG criteria in MIF2 and DDA) with value chain players (issuer, producer, insurer, distributor, customers). Groupe BPCE has set up a Task Force to build the customer questionnaire, the process formalizing the suitability, the offer, and the long-term monitoring.
- Implementation of the remediation plan for transaction reporting and regulatory reporting.
- Compliance of Group entities with EMIR regulatory obligations. The Group action plan relating to the EMIR Refit regulation was determined in the first half of 2022. In addition, an EMIR 360 check was launched in the third quarter of 2022.

Following several requests from the supervisory authorities (ESMA and AMF) in 2021, and the AMF spot mission carried out within BPCE SA, a NORMA was drawn up to oversee securitization transactions and the granting of the STS label (simple, transparent and standardized).

With regard to the market abuse system, BPCE continued its objective of supporting institutions following the assessment carried out in 2021, by providing them with quarterly files of statistics of atypical transactions by scenario, and by offering them a new "market abuse" training to help them analyze alerts and prevent market abuse.

Continuation of the remediation of Direct Transaction Reporting (DTR) with the development of an action plan presenting the actions implemented to prevent or block transactions without LEI at Groupe BPCE level. The action plan was sent to the AMF on April 22, 2022 and was followed by a mass adjustment of the stock of LEI-free transactions carried out by EuroTitres. A standard dedicated to the Post-Negotiation Transparency theme was approved by the CNM.

Concerning the regulation related to the reporting of SFTR financing transactions (Securities Financing Transaction Regulation). This reporting has been implemented since July 13, 2020. A 360 SFTR check on the declaration of transactions is planned for 2023.

The Group continued work to bring its customer processes into compliance (LEA, O2S, legal entities, derivatives, tax exemption). A remediation plan for life insurance marketing, following an ACPR audit (started in 2019), has been put in place and work is underway, in particular for the management of risk aversion, the improvement of the justification of advice, archiving of client understanding when a complex financial instrument is proposed.

Employee training and awareness

Group employees regularly receive training on customer protection issues to maintain the required level of customer service quality. These training sessions are aimed at promoting awareness of compliance and customer protection among new hires and/or sales team employees.

Ethics and compliance training, entitled "Fundamentals of professional ethics," has been set up for all Group employees. BPCE has also established a Code of Good Conduct and Ethics, rolled out to all Groupe BPCE institutions.

Groupe BPCE has implemented a mandatory regulatory training system that is reviewed annually.

French banking Separation and Regulation Act (SRAB)

The mapping of Groupe BPCE's market activities is regularly updated. It required the implementation of internal units subject to an exemption within the meaning of act No. 2013-672 of July 26, 2013 on the separation and regulation of banking activities.

Quarterly indicators are calculated by Natixis, Palatine and BRED in accordance with Article 6 of the Ministerial Order of September 9, 2014 (amended by the Ministerial Order of March 18, 2019); these quarterly indicators are supplemented by an annual indicator as well as quantitative metrics such as NBI or the VaR of the said internal units.

Based on the work carried out by the Group, it has not been necessary to create a ring-fenced subsidiary, and mandates have been implemented at the different subsidiaries in order to supervise the various activities.

In conjunction with the calculations and other work done in accordance with this act, a compliance program was adopted and implemented as from July 2015 in response to the Volcker Rule (section 619 of the US Dodd-Frank Act) within the scope of BPCE SA and its subsidiaries. Taking a broader approach than that of the French Banking Separation and Regulation Act, this program aims to map out all the financial and commercial activities of BPCE SA group, notably to ensure that they comply with the two major bans imposed by the Volcker Rule: the ban on proprietary trading and on certain transactions related to covered funds. The Volcker Rule was amended in 2020, giving rise to new Volcker 2.0 and 2.1 provisions that relax the existing system.

As every year since July 2015, the Group has certified its compliance with the Volcker system. Note: in early 2017, Groupe BPCE appointed a SRAB-Volcker officer responsible for the security of the banking segregation mechanisms.

11.2 Financial security

Financial security covers anti-money laundering and terrorist financing (AML-TF) measures as well as adherence to international sanctions targeting individuals, entities or countries, the fight against corruption and the fight against internal fraud.

The prevention of these risks within Groupe BPCE is based on:

Corporate culture

Promoted across all levels of the company, corporate culture is built on:

- customer relations principles aimed at preventing risks, which are formalized and regularly communicated to the employees;
- a harmonized training system for Group employees and specific training for employees in the financial security sector.

Organizational structure

In accordance with Groupe BPCE's charters, each institution has its own financial security unit. The Group Compliance division has a dedicated department that oversees the sector, defines financial security policy for the entire Group, draws up and validates the various standards and procedures, and ensures that these risks are taken into account during the approval procedure for new commercial products and services by BPCE.

Specialized processes

In accordance with regulations, banks have methods for detecting unusual transactions that are specific to their risk classification. These can be used, if needed, to conduct closer analyzes and to submit the required reports to Tracfin (French financial intelligence agency) or any other competent service as promptly as possible. The Group's risk classification system incorporates the "at-risk countries" factor when addressing money laundering, terrorism, tax fraud and bribery. The system was also reinforced with the establishment of a database and automated scenarios specifically targeting terrorist financing. With respect to compliance with restrictive measures related to international sanctions, Group institutions are equipped with screening tools that generate alerts on customers (asset freezes on certain individuals or entities) and international flows (asset freezes and countries subject to European and/or US embargoes).

Supervision of operations

Internal reports on the prevention of these risks are submitted to company directors and governing bodies, as well as to the central institution.

11.3 Business continuity

The management of business interruption risk is handled from a cross-business perspective. This includes the analysis of the Group's main critical business lines, notably liquidity, payment instruments, securities, individual and corporate loans, and fiduciary activities.

Organization

The Group Business Continuity department, which reports to the Group Security division, performs its tasks independently of operational divisions. These include:

- managing Group business continuity and coordinating the Group Business Continuity function;
- coordinating the Group's crisis management;
- managing the implementation of the Group Contingency and Business Continuity Plans (CBCPs) and keeping them operational;
- ensuring compliance with regulatory provisions governing business continuity;
- participating in the Group's internal and external bodies.

The tools associated with the crisis management system are constantly evolving to improve their ergonomics and increase the range of associated functions.

Improvement projects continued with the common point of streamlining processes and strengthening systems by drawing on the lessons of past systemic crises (Covid), ongoing (Russia-Ukraine crisis) or the preparation of anticipated crises (energy transition) to which business continuity is fully associated.

11.4 Information System Security (ISS)

Organization

The Group Security department (DS-G) is in charge of Information System Security (ISS) and the fight against cybercrime. It defines, implements and develops Group ISS policies. It provides continuous and consolidated oversight of information system security, along with technical and regulatory oversight. It initiates and coordinates Group projects aimed at reducing risks in its field. It also represents Groupe BPCE vis-à-vis banking industry groups and public authorities.

Groupe BPCE has established a groupwide ISS function. It brings together the Head of Group Information System Security (RSSI-G), who leads this network, and Heads of ISS for all Group entities.

As such, the ISS managers of the parent company affiliates, direct subsidiaries and IS EIGs are functionally attached to the RSSI-G. This functional link takes the form of leadership and coordination actions. This means that:

- the RSSI-G is notified of the appointment of any heads of information system security;
- the Group information system security policy is adopted by individual entities in accordance with application procedures subject to validation by the Head of Group ISS;
- a report on the institutions' compliance with the Group's information system security policy, permanent controls, risk level, primary incidents and actions is submitted to the Group Head of IS System Security.

The project to develop an exhaustive ISS map of the Group's information systems, including the establishments' private information systems, continued.

Two major projects are ongoing:

- annual assessment campaign of the Group's maturity on the five pillars of the NIST framework (Detect, Identify, Protect, Respond, Recover) in order to set numerical objectives, to pilot actions and to measure their effectiveness;
- Group Identity and Rights Management (IAM) program with the following objectives:
- establishing a Group database of individuals, applications and organizations,
- implementing Group IAM governance,
- including, if possible, all Group applications in the IAM roadmap, with automatic provisioning and an overview of authorizations.

ANTI-CYBERCRIME SYSTEMS

As a result of its digital transformation, the Group's information systems are becoming increasingly open to the outside world (cloud computing, big data, etc.). Many of its processes are gradually going digital. Employees and customers are also increasingly using the internet and interconnected technologies such as tablets, smartphones and applications on tablets and mobile devices.

Consequently, the Group's assets are constantly more exposed to cyber threats. The targets of these attacks are much broader than the information systems alone. They aim to exploit the potential vulnerabilities and weaknesses of customers, employees, business processes, information systems and security mechanisms at Group buildings and data centers.

A unified Group Security Operation Center (SOC) integrating a level 1, operating in 24x7 is operational.

Several actions have been carried out to strengthen the measures taken to combat cybercrime:

- work to secure websites hosted externally;
- improved website and application security testing capabilities;
- implementation of a Responsible Vulnerability Disclosure program by Groupe BPCE CERT.

Raising employee awareness of cybersecurity

In addition to maintaining the Group's common foundation for raising awareness of ISS, the year was marked by the continuation of phishing awareness campaigns and by the renewal of participation in "European Cybersecurity Month."

Within the scope of BPCE SA, in addition to recurring reviews of application authorizations and rights to IS resources (mailing lists, shared mailboxes, shared folders, etc.), monitoring of all websites published on the Internet and follow-up of vulnerability treatment plans have been reinforced, as well as monitoring of the risk of data leakage by e-mail or the use of online storage and exchange services.

Moreover, new employee awareness-raising and training campaigns were launched:

- phishing test, phishing awareness campaign and support for employees in situations of repeated failure;
- participation in induction meetings for new employees, including the threats and risks associated with remote working situations.

12

OPERATIONAL RISKS

12.1 Operational risk policy

Groupe BPCE has set up a system for measuring non-financial risks through the standardized use of indicators. These cover the indicators of the RAF system, the indicators resulting from the Ministerial Order of November 3, 2014, but also qualitative indicators aimed at measuring the industry's adherence to operational risk standards.

The Group's operational risk policy consists of keeping all of these indicators below the set limits, by entity and on a consolidated basis. In the event of an overrun, appropriate measures and corrective actions must be taken by the business lines owning the risks to remedy the possible failures. These measures and corrective actions must be monitored by the committee in charge of operational risks.

The operational risk policy is reviewed annually by the dedicated committee.

Organization

The Group Operational Risk division (DROG) – part of the Group Risk division – is in charge of identifying, measuring, monitoring and managing the operational risks incurred in all activities and functions undertaken by Group institutions and subsidiaries.

The operational risk system consists of:

- a central organization and a network of operational risk managers and officers, working in all activities, entities and subsidiaries of Group institutions and subsidiaries;
- a methodology based on a set of standards and an OR tool used throughout the Group.

The Operational Risk function operates:

- in all structures consolidated or controlled by the institution or the subsidiary (banking, financial, insurance, etc.);
- in all activities exposed to operational risks, including outsourced activities, within the meaning of Article 10 q and Article 10 r of the Ministerial Order of November 3, 2014 as amended "outsourced activities and services or other critical or essential operational tasks".

The Group Non-Financial Risk Committee defines the risk policy rolled out to the institutions and subsidiaries, and the DROG ensures that the policy is applied throughout the Group.

Methodology

The operational risk management system is part of the Risk Assessment Statement (RAS) and Risk Assessment Framework (RAF) systems defined by the Group. These systems and indicators are adapted at the level of each Group institution and subsidiary.

The mapping methodology is part of the Group's permanent control system and includes the Operational Risk, Compliance, Information System Security, Personal and Property Safety and Permanent Control functions.

Measurement of risk exposure is based on a forward-looking model, which quantifies and classes risk scenarios and thus provides the Non-Financial Risk Committees with the necessary elements to define their risk tolerance.

Risk-predictive indicators are produced from the main risks identified in the non-financial risk map.

Risk supervision and monitoring were improved through the drafting of reports aimed at providing a uniform measurement to the Group as a whole of its risk exposure and cost of risk.

The production of the OR function performs two types of level 2 controls on operational risks (these permanent level 2 controls will be carried out from the end of 2022 by the Governance and Risk Control department of the Risk division):

- comprehensive automated controls;
- sample-based manual controls.

BPCE's Operational Risk function ensures that the structure and systems in place at the institutions and subsidiaries allow them to achieve their objectives and fulfill their duties.

To that end, it:

- coordinates the function and performs risk supervision and controls at the institutions/subsidiaries and their subsidiaries;
- centralizes and analyzes the Group's exposure to non-financial risks, verifies the implementation of corrective actions decided by the Operational Risk Committee, and reports any excessive implementation times to senior management;
- performs controls to ensure that Group standards and methods are observed by the institutions and subsidiaries;
- performs a regulatory watch, distributes and relays operational risk alerts due to incidents with the potential to spread to the appropriate institutions/subsidiaries;
- prepares reports, by institution or subsidiary, for the Group and the regulatory authorities (COREP OR), analyzes the reports and content of the OR committees of the institutions and subsidiaries, and notifies the Group Non-Financial Risk Committee of any inadequate systems and/or excessive risk exposure, which in turn notifies the institution in question.

Operational risk oversight

Operational risk oversight within the Group is coordinated at two levels:

1. At the level of each Group institution	2. At Groupe BPCE level
The Operational Risk Committee is responsible for adapting the operational risk management policy and ensuring the relevance and effectiveness of the operational risk management system. Accordingly, it: • examines major and recurring incidents, and validates the associated corrective actions; • examines indicator breaches, decides on associated corrective actions, and tracks progress on risk mitigation initiatives; • examines permanent controls carried out by the Operational Risk function and in particular any excessive delays in implementing corrective actions; • helps organize and train the network of OR officers; • determines if any changes need to be made in local insurance policies; • the frequency of meetings depends on the intensity of the institution's risks, in accordance with three operational schemes reviewed once a year by the Group Non-Financial Risk Committee (CRNFG) and communicated to the entities.	The Group Non-Financial Risk Committee meets quarterly and is chaired by a member of the Executive Management Committee. Its main duties are to define the OR standard, ensure that the OR system is deployed at the Group entities, and define the Group OR policy. Accordingly, it: • examines major risks incurred by the Group and defines its tolerance level, decides on the implementation of corrective actions affecting the Group and monitors their progress; • assesses the level of resources to be allocated; • reviews major incidents within its remit, validates the aggregated map of operational risks at Group level, which is used for the macro-level risk mapping campaign; • monitors major risk positions across all Group businesses, including risks relating to non-compliance, financial audits, personal and property safety, contingency and business continuity planning, financial security and information system security (ISS); • lastly, validates Group RAF indicators related to non-financial risks as well as their thresholds.

12.2 Monitoring

Incident and loss data collection

Incident data are collected to build knowledge of the cost of risks, continuously improve management systems, and meet regulatory objectives.

An incident log (incident database) was created to:

- broaden risk analysis and gain the knowledge needed to adjust action plans and assess their relevance;
- produce COREP regulatory half-year operational risk statements;
- produce reports for the executive and governing bodies and for non-management personnel;
- establish a record that can be used for operational risk modeling.

Incidents are reported as they occur, as soon as they are detected, in accordance with Group procedure. A whistleblowing procedure has been set up for major incidents and internal limit breaches to round out the incident data collection system.

Operational risk oversight

MAPPING

The operational risk management system relies on a mapping process which is updated annually by all Group entities.

Mapping enables the forward-looking identification and measurement of high-risk processes. For a given scope, it allows the Group to measure its exposure to risks for the year ahead. This exposure is then assessed and validated by the relevant committees in order to launch action plans aimed at reducing exposure. The mapping scope includes emerging risks, risks related to information and communication technologies and security, including cyber risks, risks related to service providers and risks of non-compliance.

This same mapping mechanism is used during the Group's ICAAP to identify and measure its main operational risks. The operational risk map also serves as a basis for the macro-risk mapping campaign covering the institutions, and thus for the Group overall.

ACTION PLANS AND MONITORING OF CORRECTIVE ACTIONS

Corrective actions are implemented to reduce the frequency, impact or spread of operational risks. They may be introduced following operational risk mapping, breaches of risk indicator thresholds or specific incidents.

Progress on key actions is monitored by each entity's Operational Risk Management Committee.

At Group level, progress on action plans for the principal risk areas is also specifically monitored by the Non-Financial Risk Committee.

Incident alert procedure

The alert procedure for serious incidents has been extended to the entire scope of Groupe BPCE. The aim of this system is to enhance and reinforce the system for collecting loss data across the Group.

An operational risk incident is deemed to be serious when the potential financial impact at the time of detection is over €300,000. Operational risk incidents with a material impact on the image and reputation of the Group or its subsidiaries are also deemed to be serious.

There is also a procedure in place covering material operational risks, within the meaning of Article 98 of the Ministerial Order of November 3, 2014, as amended by the Ministerial Order of February 25, 2021, for which the minimum threshold is set at 0.5% of Common Equity Tier 1.

Operational risk measurement

Groupe BPCE applies the standardized approach to calculate its capital requirements. Moreover, elements of internal control are considered in the assessment of the Group's net risk exposures.

12.3 Control

Permanent controls have been defined to control the quality of the operational risk management system.

Two types of Level 2 controls are carried out on Operational Risks:

- Compliance checks with standards (comprehensive and automatic):

Groupe BPCE checks the system when it presents any deviations from the Operational Risk Standards on the various themes of Operational Risk Management: organizational system for the management of OR, incidents, mapping, predictive risk indicators, corrective actions etc.

- Data quality controls (sample and manual):

Groupe BPCE performs Level 2 controls of the Operational Risk function.

These controls are carried out on the basis of the control reports of the Institutions system, and therefore on the same scope as these reports: system, incidents, mapping (risk situations), predictive risk indicators, corrective actions.

The majority of these controls are carried out on the basis of data samples extracted from the operational risk management tool. The results of these Level 2 sample controls are recorded in the permanent controls management tool.

Other controls concern certain points relating to risk coverage. They are exhaustive and their results are subject to specific formalization (minutes of meetings relating to serious incidents, record of decisions, etc.).

HIGHLIGHTS

The following specific measures have been taken to monitor operational risk since the start of the Ukraine crisis:

- measurement of impact completeness: joint oversight between CBCP (Contingency and Business Continuity Plan) functions and operational risks, with exchange of information and recognition of operating losses due to the conflict (during monthly videoconferencing sessions of the institutions Operational Risk functions);
- establishment of monthly reporting on losses due to the conflict for submission to the ECB and to Groupe BPCE's directors (under the responsibility of the consolidated operational risks team).

In addition, with the aim of improving risk management, work has been initiated to identify levers (changes in procedures, integration of IT workflows, strengthening of training, etc.) for improving the results of the first and second level controls of IT and communication risks.

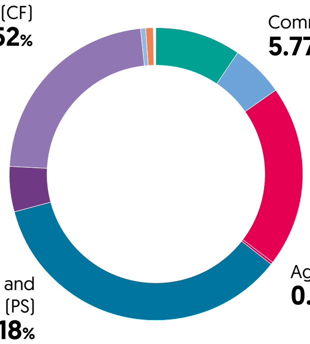
In terms of Insurance, the networks and subsidiaries benefit from coverage of their insurable operational risks under Group insurance policies contracted from leading insurance companies. In addition to this system, an internal Group reinsurance company has been set up.

EU OR1 – CAPITAL REQUIREMENTS FOR OPERATIONAL RISK AND RISK-WEIGHTED EXPOSURE AMOUNTS

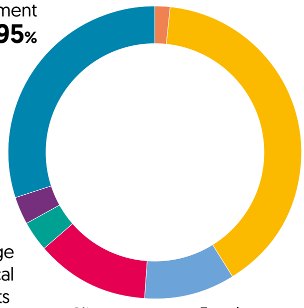
		a	b	c	d	e
	Banking activities	**12/31/2020**	**12/31/2021**	**12/31/2022**	**Capital requirements**	**Risk-weighted exposure**
1	Banking activities under basic indicator approach (BIA)	-	-	-	-	-
2	Banking activities under the Standardized Approach (TSA)/alternative standardized approach (ASA)	21,810	25,368	25,634	3,301	41,266
3	*Standardized Approach (TSA):*	*21,810*	*25,368*	*25,634*		
4	*Alternative Standardized Approach (ASA):*	-	-	-		
5	Banking activities under advanced measurement approach (AMA)	-	-	-	-	-

BREAKDOWN OF LOSSES AT 12/31/2022

BREAKDOWN OF LOSSES BY BASEL BUSINESS LINE



BREAKDOWN OF LOSSES BY BASEL LOSS EVENT CATEGORY



Operational risk mitigation techniques

In terms of Insurance, the networks and subsidiaries benefit from coverage of their insurable operational risks under Group Insurance policies contracted from leading Insurance companies. This system is complemented by a reinsurance captive that allows the adjustment of deductible levels.

COVERAGE OF INSURABLE RISKS

On January 1, 2022, BPCE SA had taken out (for itself):

- that of its subsidiaries, including GFS;
- as well as the Banque Populaire and Caisse d'Epargne networks, with the exception of CASDEN Banque Populaire with respect to the "Property Damage" insurance coverage for Registered offices & Similar and their contents (including IS equipment) and the consequent "losses in banking activities", described below in point E/;

the following main Insurance policies to cover its insurable operational risks and protect its balance sheet and income statement:

A/ Combined "Global Banking (Damages to Valuables and Fraud)" & "Professional Civil Liability" policy with a total maximum payout of €217 million per year of insurance, of which:

a) €92.5 million per year, combined "Global Banking/Professional Civil Liability/Cyber Risks" and underlying the guaranteed amounts indicated in b) and/or c) and/or d) below;

b) €48 million per claim and per year (sub-limited in "Fraud" to €35 million per claim), dedicated to the "Global Banking" risk only;

c) €25 million per claim and per year, solely reserved for "Professional Civil Liability" risk;

d) €51.5 million per claim and per year, combined "Global Banking/Professional Civil Liability" insurance available in addition to or after use of the amounts guaranteed set out in b) and/or c) above.

The maximum amount that can be paid out for any one claim under this arrangement is €100 million under "Professional Civil Liability" coverage and €100.5 million under "Fraud" coverage in excess of the applicable deductibles.

B/ "Regulated Intermediation Liability" (in three areas: Financial Intermediation, Insurance Intermediation, Real Estate Transactions/Management) with a total maximum payout of €10 million per claim and €13 million per year.

C/ "Operating Civil Liability" covering €100 million per claim, as well as a "Subsidiary Owner Civil Liability"/"Post Delivery-Reception Civil Liability" coverage extension for up to €35 million per claim and per year of insurance.

D/ "Company Directors Civil Liability" for up to €150 million per claim and per year of insurance.

E/ "Property Damage" to "Registered Offices & Similar" and to their content (including IS equipment) and the consecutive "losses in banking activities," for up to €300 million per claim (sub-limited to €100 million per claim and €200 million per year for consequential "losses in banking activities").

F/ "Protection of Digital Assets against Cyber-Risks" & the consecutive "losses in banking activities," for up to €100 million per claim and €156.5 million per year of insurance.

This coverage extends worldwide for initial risk or umbrella risk, subject to certain exceptions, mainly in terms of "Professional Civil Liability" where the policy does not cover permanent institutions based in the United States (where coverage is obtained locally by GFS' US operations).

All the insurance policies mentioned above were taken out with reputable, creditworthy insurance companies and in excess of the deductibles and Groupe BPCE's risk-retention capacity.

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INSURANCE, ASSET MANAGEMENT, FINANCIAL CONGLOMERATE RISKS

Organization

The Non-Banking Equity Risk department of the Group Risk division consisted of four units in 2021:

- Group Risk Insurance;
- Asset Management Risk;
- Financial Conglomerate;
- Stress Tests and Methodologies.

The Group Insurance Risk division has been integrated into the "Conglomerate, Insurance & Stress Tests" service, which now includes the department's historical activities, focused on the risks of the Group as a bancassurer.

In addition, two additional divisions were created in 2022:

- Research;
- Combined risks.

Overall, the Non-Banking Equity Risk department is based on a matrix organization.

Insurance risks

In coordination with the parent banks (BRED, Oney), Groupe BPCE's Risk division ensures that insurance risks (including technical risks) are effectively monitored within the main insurance companies in which the Group is the majority shareholder, *i.e.* BPCE Assurances, Compagnie Européenne de Garanties et de Cautions (CEGC), Prépar-Vie and Oney Insurance. In addition, coordination is ensured with Parnasse Garanties and its parent company CASDEN.

BPCE SA has been the 100% direct parent company of CEGC since 2019, and of BPCE Assurances since March 2022.

In 2022, after the Pléiade transaction, the holding company Natixis Assurances was renamed Assurances du Groupe BPCE (AGBPCE), then BPCE Assurances from October. BPCE Assurances comprises the personal insurance (BPCE Vie, BPCE Life) and non-life insurance (BPCE Assurances IARD, BPCE IARD) subsidiaries.

In addition, since 2011, the Group has deployed an insurance risk unit. This meets the requirements of the Financial Conglomerates Directive 2002/87/EC (FICOD) and its transposition into French law by the Ministerial Order of November 3, 2014 on the supplementary supervision of financial conglomerates, through the Group's cross-functional insurance risk monitoring system, while at the same time ensuring functional and regulatory interoperability between the banking and insurance sectors.

In this context, Insurance Risk Monitoring Committees have been set up for each of the companies in the Sector. These take place every quarter and are supplemented by frequent discussions with the Risk departments of the companies.

The principle of subsidiarity applies, with checks carried out firstly by the insurance companies, then at the level of the Risk divisions of the parent banks of the companies (BRED, Oney, BPCE SA), and finally by the Risk division which informs the Group Risk and Compliance Committee every six months.

Insurance technical risks

Insurance risk is the risk of any mismatch between expected losses and actual losses. Depending on the insurance products concerned, the risk varies according to changes in macroeconomic factors, changes in customer behavior, changes in public health policy, pandemics, accidents and natural disasters (*e.g.* such as earthquakes, industrial accidents or acts of terrorism or war). The credit insurance business is also exposed to credit risk.

The management of insurance risks requires a good understanding of the technical insurance risks in order to be able to meet its commitments to policyholders and contract beneficiaries; this is accompanied by special attention to the financial risks borne by assets under representation.

In addition to protecting the balance sheet and income statement of insurance companies, the aim is to guarantee the solvency and liquidity of insurance companies.

To this end, the Group's companies have put in place effective systems for measuring, reporting and managing risks. The important preparatory phase enabled the implementation of the systems to comply with the new regulatory requirements required since January 1, 2016 with the implementation of the Solvency II directive (Pillar I Quantitative Solvency Requirements, Pillar II Governance & ORSA, Pillar III Prudential reporting and public information).

As of January 1, 2023, the Group's companies will be subject to IFRS 17 "Insurance contracts", which will harmonize and update the recognition, measurement and presentation of commitments in the liabilities of companies.

Risks inherent to the Group's main companies

BPCE ASSURANCES

BPCE Assurances is the Insurance division of Groupe BPCE and is divided into two business lines:

- the personal insurance business, focused on developing portfolios of life insurance and endowment policies for investment and retirement purposes, as well as personal protection insurance portfolios;
- the non-life insurance business, focused on developing portfolios for auto and multi-risk home insurance, personal accident insurance, legal protection, healthcare and property & casualty insurance.

Given the predominance of the investment solutions activity, the main risks to which BPCE Assurances is exposed are financial. The company is also exposed to underwriting risks (life and non-life), as well as counterparty risk.

MARKET RISK

Market risk is in large part borne by subsidiary BPCE Vie on the financial assets that underpin its commitments with guaranteed principal and returns (euro-denominated policies: €70.2 billion on the main fund balance sheet). The company is exposed to asset impairment risk (fall in the equity or real estate market, widening spreads) as well as the risk significant changes in interest rates.

A rapid rise in interest rates is likely to reduce the attractiveness of euro-denominated life insurance policies compared to other types of investments. However, this risk is limited due to the prospect of inflows and the reserves set aside to reduce the portfolio's exposure to rising interest rates. This risk also gradually decreases as interest rates stabilize as bonds mature and assets are replaced with higher rates.

Conversely, a drop in interest rates would be liable to generate insufficient returns to cover the capital and guaranteed rates. To deal with this risk, BPCE Vie has for several years marketed only zero guaranteed minimum rate policies ("GMR") contracts (more than 95% of commitments), with an average GMR of 0.14%. In addition, since mid-2021, the new contracts include a capital guarantee gross of management fees on outstandings.

To manage market risk, the sources of return have been diversified, namely *via* investments in new asset classes (funding the economy, infrastructure, etc.). This diversification is managed by a strategic allocation, defined on a yearly basis, that takes into account regulatory constraints, commitments to policyholders and commercial requirements.

CREDIT RISK

Credit risk is monitored and managed in compliance with BPCE Assurances' internal standards and limits. On December 31, 2022, 65% of the fixed-income portfolio is invested in securities rated A or higher.

LIFE INSURANCE UNDERWRITING RISK

The main risk to which life insurance underwriting is exposed is associated with the investment solutions activity in euro. In a situation of sharp rise in interest rates, the major risk corresponds to a risk of massive redemptions: the Company could be forced to sell assets at an inopportune time, thus exposing itself to a risk of financial loss, as well as to the loss of future margins on redeemed policies. If the level of interest rates stabilizes, the risk of massive redemptions would gradually be reduced (the assets of euro-denominated funds benefiting from the level of interest rates). Conversely, in a situation of very low interest rates, BPCE Assurances is subject to the risk of a drop in redemptions.

NON-LIFE INSURANCE UNDERWRITING RISK

The non-life insurance underwriting risk to which BPCE Assurances is exposed is borne by its subsidiary BPCE Assurances IARD:

- premium risk: to ensure that the premiums paid by the policyholders match the transferred risk, BPCE Assurances IARD implemented a portfolio monitoring policy whereby each policy is given a score based on its track record over three years. The score factors in types of claims, number of claims, their cost and other variables specific to the activity in question (degree of liability and bonuses/penalties for auto insurance, for instance). This supervision policy also helps to detect potential risks arising from large claims, and to arrange adequate reinsurance coverage;
- risk of loss: each time inventory is taken, an actuarial assessment of the provisions for claims payable is conducted based on methods widely recognized by the profession and required by the regulator;
- catastrophe risk: catastrophe risk is the exposure to an event of significant magnitude generating a multitude of claims (storm, risk of civil liability, etc.). This risk is therefore reinsured either through the government in the event of a natural disaster or an attack, for example, or through private reinsurers, specifically in the event of a storm or a civil liability claim.

COUNTERPARTY RISK

The counterparty risk to which BPCE Assurances is exposed mainly concerns reinsurance counterparties. The selection of reinsurers is a key component of managing this risk:

- BPCE Assurances deals with reinsurers that are subject to a financial rating by at least one of the three internationally recognized rating agencies, and that have a Standard & Poor's equivalent rating of A- or higher;
- using several reinsurers ensures counterparty diversification and limits counterparty risk.

CEGC

Compagnie Européenne de Garanties et de Cautions is the Group's Security and Guarantee insurance entity. It is exposed to underwriting risk, market risk, reinsurer default risk and operational risk.

In 2022, the production of real estate loans guaranteed by CEGC remained sustained in a context of rising interest rates, which were particularly marked in the second half of the year. The year 2022 saw a low claims ratio of less than 20% of earned premiums (gross reinsurance ratio).

Under the Solvency II prudential regime, CEGC uses a partial internal model approved by the ACPR. It meets the robustness requirement applicable to the mortgage guarantors.

In 2022, CEGC benefited from a €150 million capital increase to reinforce the structure of eligible capital to cover the Solvency Capital Requirement.

UNDERWRITING RISK

Underwriting risk is the main risk incurred by CEGC. It is essentially a counterparty risk, as the commitments given by CEGC to beneficiaries of guarantees result in direct exposure to individual or corporate insured parties. These commitments are regulated and provisioned under liabilities in the balance sheet. They amounted to €3.1 billion on December 31, 2022 (up 10% compared to end-2021).

BPCE42 – AMOUNT OF CEGC REGULATED COMMITMENTS *(in millions of euros)*

CEGC activities	December 2022	Change December 2022 *versus* December 2021
Individual customers	2,785	9.1%
Single-family home builders	72	50.9%
Property administrators – Realtors	18	22.9%
Corporate customers	58	15.6%
Real estate developers	23	9.6%
Professional customers	106	8.7%
Social economy – Social housing	59	7.6%
Structured collateral	8	(23.8%)
TOTAL	**3,130**	**9.8%**

MARKET RISK

CEGC's short-term investment portfolio totaled over €4 billion on its balance sheet on December 31, 2022 hedging underwriting provisions.

Market risk associated with the short-term investment portfolio is limited by the company's investment choices.

The company's risk limits are set out in the financial management charter and the asset management agreement established with Ostrum. As an insurance company, CEGC does not require funding, since insurance premiums are collected before the disbursement of claims. Nor does CEGC carry transformation risk: the investment portfolio is entirely backed by own funds and technical reserves.

BPCE43 – CEGC INVESTMENT PORTFOLIO

	12/31/2022			12/31/2021		
in millions of euros	Balance sheet value, net of provision	in %	Mark to market	Balance sheet value, net of provision	in %	Mark to market
Equities	84	2.10%	73	260	7.84%	322
Bonds	2,201	54.70%	1,841	2,286	68.92%	2,389
Diversified	105	2.60%	97	249	7.51%	256
Cash	1,367	34.00%	1,369	267	8.05%	267
Residential mortgages	203	5.10%	222	199	6.00%	215
FCPR	29	0.70%	47	25	0.75%	38
Private debt	34	0.80%	33	28	0.84%	28
Others	2	0.10%	2	2	0.06%	2
TOTAL	**4,025**	**100%**	**3,684**	**3,317**	**100%**	**3,518**

REINSURANCE RISK

CEGC hedges its liability portfolio by implementing a reinsurance program tailored to its activities.

In loan guarantees, reinsurance is used as a tool for regulatory capital management. It protects guarantee beneficiaries in the event of an economic recession leading to a loss of up to 2% of outstanding guaranteed loans.

In the corporate segments, the program is used to protect CEGC's capital by hedging against high-intensity risks. It has been calibrated to cover three major individual loss events (loss due to the financial failure of a counterparty or a group of counterparties) with the potential to significantly impact CEGC's income statement.

Reinsurer default risk is governed by counterparty concentration and rating limits. CEGC's reinsurance programs are underwritten by a broad panel of international reinsurers with a minimum rating of A on the S&P scale.

Asset management risks

Like the system adopted for the Insurance business line, the operation of this system is based on subsidiarity with the Risk divisions of the parent banks and business lines; in particular, Natixis Investment Managers, which consolidates most of the Group's assets under management.

By setting up an Asset Management Risk System, the Risk division pursues the following main objectives:

1. identify the major risks that could impact the Group's solvency trajectory as a Financial Conglomerate to cover its banking or Conglomerate prudential ratios;
2. be associated with the contributions of the sector during Group exercises (ICAAP, PPR, stress test, etc.) so as to identify the risks of the business model on the contribution to results and equity, quantify them and prioritize them;
3. organize the management of the system by specifying a risk review and setting up a formal quarterly meeting;
4. inform General Management by presenting a summary of the review of the risks of our asset management activities to the Group Risk and Compliance Committee.

In the Asset Management business line, the Risk division formally ensures: the coordination of the risk system (cross-functional workshops or focus); running cross-functional projects related to the banking sector; information to General Management with a summary report for the members of the Group Risk and Compliance Committee.

The system is based on contributions from asset management companies and their work on risks.

Due to its large majority, the system relies mainly on Natixis Investment Managers. The re-use of existing work and methodologies locally is favored to establish supervision at the Group level. The key risk monitoring indicators are determined with Natixis IM in coordination with GFS.

The Risk division focuses on risks that may affect the Group such as redemption risk and the associated potential step-in risk, seed money and operational risks (based on the Group's OR), including through stress tests of NIM tests economic capital review. GFS' Risk division regularly monitors NIM's risks through its role as direct parent company.

The Group Risk division, together with GFS and/or Natixis IM, anticipates the impacts of consultations and regulatory changes.

The system also provides for the implementation of an annual review for asset management companies that are not significant at the Group level but significant for their direct parent banking companies for the following entities: EcoFi Investissements, Palatine AM and Promepar AM.

Additional monitoring of the financial conglomerate

Groupe BPCE, identified by the ACPR/ECB as a financial conglomerate due to the absolute and relative size of its banking and insurance activities, is subject to the related additional monitoring requirements. Since the entry into force of the Single Supervisory Mechanism (SSM), the ECB has coordinated the supervision of predominantly banking financial conglomerates.

The Complementary Conglomerate Monitoring function was officially created in 2017 following the validation by the Management Board of the function's mission statement. The latter identifies the macro-objectives and stakeholders within the Group. The roles, responsibilities and interactions between each of the players in the sector have been defined.

Depending on the themes, committees are organized three to four times a year and the subjects are reported to the Group Risk and Compliance Committee.

The regulation related to the conglomerate requires an overview of the entire accounting consolidation scope (banking, insurance, Asset Management and non-financial sector). Additional monitoring focuses on:

- capital adequacy of the financial conglomerate;
- monitoring of intra-group transactions between the various entities of the conglomerate;
- monitoring the concentration of risks;
- risk management procedures and internal control system.

In terms of risk monitoring:

- the financial conglomerate approach aims to capture the main interactions between the banking, insurance and asset management sectors that could, due to an exogenous or endogenous event, impact the Group's risk profile and its main trajectories (results, solvency, liquidity);
- it makes it possible to consolidate the banking and insurance sector metrics, in particular capital requirements;
- the complementary supervision is based mainly on the banking system as a whole, and on the insurance and asset management risks.

The conglomerate's excess equity is monitored in the Group's RAF (Risk Appetite Framework) first-rate indicators. In order to provide a forward-looking view of the Group's solvency through the financial conglomerate's reading grid, Groupe BPCE projects the excess equity over several years under different scenarios.

The entire system, in its main dimensions – Insurance, Asset Management, Banking, Financial Conglomerate – is the subject of presentations and discussions with the joint ECB/ACPR supervision team, in particular at meetings dedicated to the JST (Joint Supervisory Team). In particular, the organization of the risk management system, as well as the main analyses and points of attention brought to the attention of the Group's General Management during the year, are reviewed.

STRESS TESTS & METHODOLOGIES

In a conglomerate approach, a global and integrated system of solvency trajectories and stress tests has been developed. This system encompasses and is based on the three regulations Solvency II, Basel III and Financial Conglomerate. The application of common assumptions in these three dimensions provides a holistic view of the Group's solvency.

The Risk division is mainly responsible for:

- the coordination of insurance sector stress tests, in particular ORSAs (Pillar II of Solvency II); from the determination of stress assumptions to the analysis of results at Group level;
- the design of methodologies for linking the insurance sector to the prudential banking group;
- the analysis of contagion mechanisms and regulatory and economic interactions between the various sectors of the Group as a financial conglomerate.

The Group's insurance companies are included in the banking STI (Internal Stress Tests) as part of the ICAAP (Internal Capital Adequacy Assessment Process) normative approach. The modeling includes:

- the simulation of Solvency II ratios, SCR and MCR, in order to objectify any capital requirements;
- the simulation of "IFRS variables" that impact the bank solvency ratio in accordance with the prudential specifications (Net income retained or distributed, OCI, value and difference in equity method, etc.), both under IAS 39/IFRS 4 and IFRS 9/17 from the end of 2022;
- the fees and commissions paid by companies to the Group's distribution payment networks or asset managers.

As part of the ICAAP Economic Approach, the Non-Banking Equity Risk department has developed an Economic Capital model for Participations Assurance risk (carry and step-in risk). Designed in coordination with the Finance and Strategy division and the companies' Risk divisions, this model makes it possible to evaluate and monitor, using an internal economic approach, the bank capital consumed by insurance. It aims to enhance the joint management of the risk/profitability ratio. The economic capital requirement has been assessed on a quarterly basis since the third quarter of 2021.

In addition, the Non-Banking Equity Risk department undertook a review of the economic capital models relating to Natixis IM (NIM) activity, in coordination with NIM and GFS, in order to adapt them, if necessary, to the specificities of Asset Management in terms of both risk and business model.

More generally, the Non-Banking Equity Risk department coordinates or supervises the work of the Insurance and Asset Management businesses and contributes to the Group's work. This work concerns methodological or quantitative aspects specific to each non-banking business line and their alignment with the banking group (actuarial methods, EBA stress tests, work to quantify the impact of physical climate risk, etc.).

Activities in 2022

INSURANCE	ASSET MANAGEMENT	FINANCIAL CONGLOMERATE	STRESS TESTS & METHODOLOGIES
Operational implementation, post-Pléaide, of BPCE Assurances / BPCE risk governance	Operational implementation, post-Pléiade, of NIM / GFS / BPCE risk governance	Real estate risks, Group Solvency & Liquidity (insurance-surety / bank interactions) - Implementation of recommendations (including rating of surety insurers) and presentation of project monitoring to the Group Risk and Compliance Committee	Group Insurance & Bankassurance Normative Stress Tests - ORSA coordination, STI ICAAP & Conglomerate projections
Mapping of the risk impacts of the increase in inflation and interest rates, in Life and Non-Life	Mapping of the risk impacts of the rise in inflation and interest rates on seed money and third-party management	Intra-group transactions (contagion risks) & Risk concentration - Monitoring of the project to redesign reporting in support of the Group Accounting department	Economic capital for the insurance participations risk - Industrialization of the calculation process and strengthening of the control system
Review of Risk Appetite Framework indicators	Analysis of Natixis IM's risks using a dashboard enriched with new indicators	Implementation of a framework for level 2 controls relating to the production of the surplus capital of the financial conglomerate	Economic Capital for the Asset Management business line - Initiation of a NIM Economic Capital review to improve the understanding of the specifics of this Business Line

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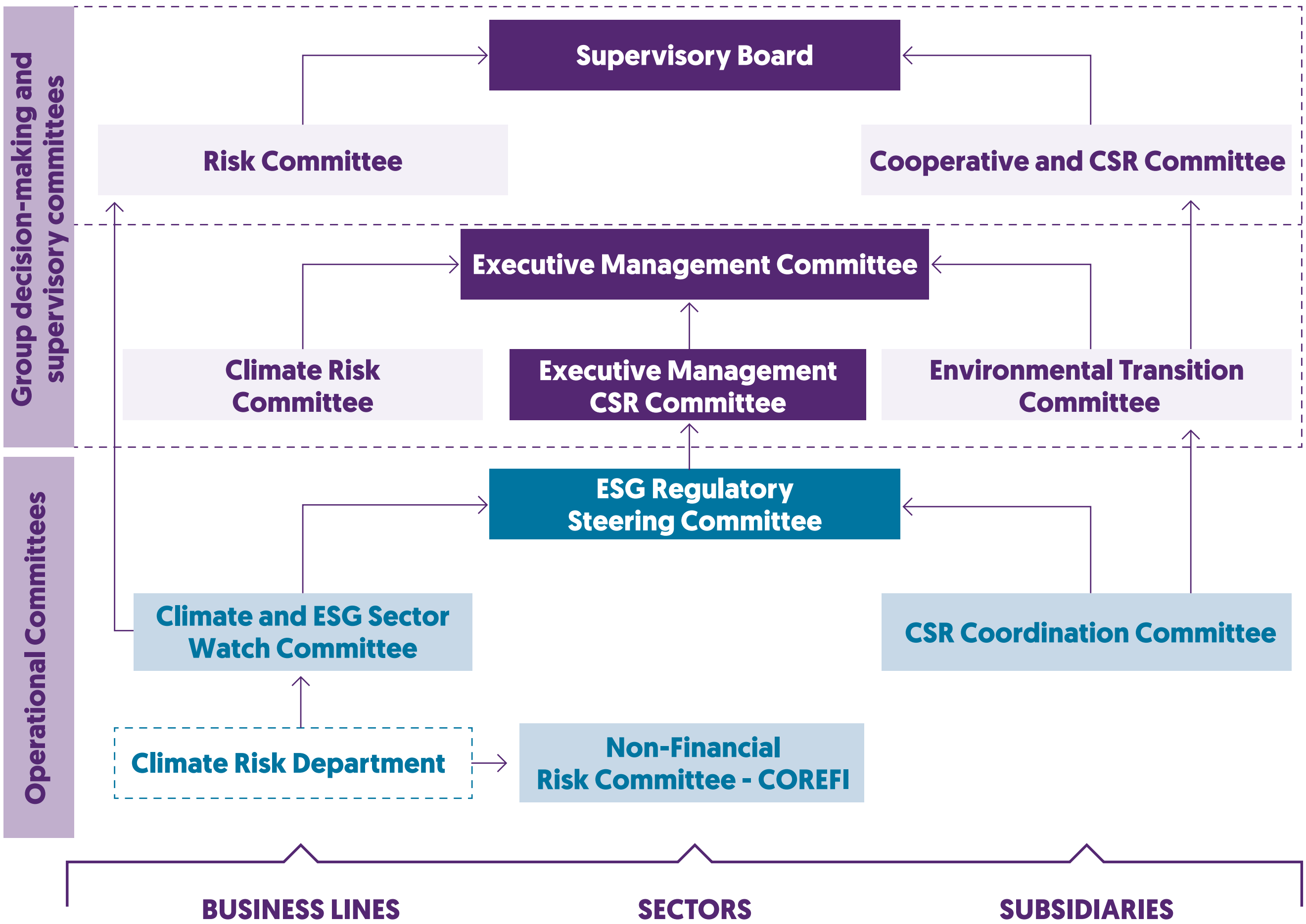
CLIMATE RISKS

14.1 Governance and structure

The Group Risk division structured the management of climate risks by setting up the Climate Risks department at the end of 2021. The department's objectives are organized around the 13 expectations of the ECB's guide to climate and environmental risks published in November 2020. This Climate Risk department relies on a large network of around 60 climate risk correspondents in all Groupe BPCE companies and in the other departments of the Group Risk division. The Climate Risk department strives to:

- develop processes and analysis tools to strengthen the management of climate risks (physical and transition) to better integrate them into the Group's risk appetite framework;
- assess the materiality of climate risks by reference to the main traditional risk classes: credit risk, financial risk (market risk, liquidity risk) and operational risk;
- include climate risks in Groupe BPCE's usual risk management framework (credit policy for companies and individuals, and according to the types of assets financed) and take them into account during periodic updates of the Group's sectoral policies;
- include climate risks in the investment and commitment processes of asset management and insurance activities.

ORGANIZATION OF THE BODIES INVOLVED TO ADDRESS CLIMATE CHANGE



14.2 Acceleration of the integration of climate and environmental risks with the climate risk management program

Groupe BPCE risk materiality matrix

As part of the publication of Groupe BPCE's first TCFD report in October 2021, the Group Risk division has defined a materiality matrix for climate risks:

The materiality of the risks associated with climate change is assessed by reference to the main risk classes of Pillar I of Basel III, namely credit risk, market risk and operational risk, including non-compliance and reputation risk. Groupe BPCE has therefore put in place a robust system for identifying climate risk factors that could impact the Group's traditional risks, together with precise monitoring. A process to update the matrix in each of the Group's entities was launched in the first quarter of 2023.

RISK CATEGORY	PHYSICAL RISKS				TRANSITION RISKS	
Types of risk	Strategic Plan 2024 Horizon		Time horizon: long term (> 4 years)		Strategic Plan 2024 Horizon	Time horizon: long term (> 4 years)
	Algus	Chronic	Algus	Chronic		
Credit and counterparty risk: • customer defaults • impairment of collateral	Low		Moderate		Moderate	High
Market and asset valuation risk: • changes in the valuation of shares, interest rates, commodities, etc.	Low		Moderate		Low	Moderate
Liquidity and balance sheet structure: • risk of a short-term liquidity crisis • rirefinancing risk	Low		Moderate	Low	Low	Moderate
Insurance claim	Low		Moderate	Low	Low	Low
Own investment risk	Low		Moderate		Low	Low
Risk in customer portfolios *(insurance and asset management)*	Low		Moderate		Low	Moderate
Operational risk	Low		Moderate		Low	Moderate
Reputational risk	Low		Low		Moderate	High
Strategic risk	Low		Moderate		Moderate	High
Legal, compliance and regulatory risk	Low		Low		Moderate	High

"Acute physical risks" are defined as direct losses triggered by extreme weather events, the resulting damage of which may lead to the destruction of physical assets (real estate and/or production) and cause a drop in local economic activity and possibly a disruption of value chains. "Chronic physical risks" are the direct losses triggered by longer-term climate changes (sea level rise, chronic heat waves, modification of rainfall patterns and increase in their variability, disappearance of certain resources) that may progressively deteriorate the productivity of a given sector.

"Transition risk" results from the economic and financial consequences related to the effects of the implementation of a low-carbon economic model, whether through changes in regulations, technological progress, or changes in consumer expectations and reputational repercussions.

Climate risk management program

The Climate Risk department coordinates the implementation of the climate risk management framework through a dedicated program. This program, in line with the Group's climate and environmental commitments, addresses specific objectives for all business lines and all sectors. The proposed system aims to ensure the most comprehensive coverage of the 13 pillars proposed by the ECB in its guide on climate and environmental risks of November 2020. It also strives to integrate the national or international regulatory perspectives that are currently the reference.

This program is regularly updated with the points of attention specified by the ECB, initially based on the feedback of the self-assessment questionnaire, formalized through discussions at the end of 2021, then through the thematic review carried out in early 2022.

Concretely, this system is organized around nine major areas (governance, risk appetite framework, stress test, financial and market risks, operational risks, credit risks, risk control system, the dashboard, and data).

The work and expectations are thus precisely qualified, by theme, making it possible to know and monitor the status, the implementation schedule, the people in charge in the Climate Risk department and other departments, such as those involved in its implementation, and the expected deliverables.

Representatives of Banques Populaires, Caisses d'Epargne and Global Financial Services are also involved in the program to ensure the operationality of the actions planned in each Group entity.

GOVERNANCE

In 2022, Groupe BPCE's committee procedure was strengthened with the generalization of climate-related elements in the committee procedure of each of its entities.

The coordination of the climate risk correspondents has increased employee awareness and training actions are offered in the other departments. A monthly newsletter, a quarterly conference (morning) and virtual classes on specific topics are likely to promote the dissemination of the climate risk culture in all entities. The best practices identified are presented at these regular or *ad hoc* events. The Climate Risk Pursuit training program continues to be rolled out in the institutions. At the end of July 2022, 18,037 employees had taken part in the program. In addition, training courses that meet expectations as closely as possible are being developed. The governing bodies are also trained on these subjects on a regular basis.

RISK APPETITE FRAMEWORK

The "Climate risk/Transition risk" and "Climate risk/Physical risk" categories were added to BPCE's risk framework in 2019. At this stage, the materiality of these risk categories has been assessed by experts and supported by the mapping work presented above. The transition risk was considered to be material, including in the short term, given the potential reputational impacts, the risks related to changes in the regulatory and legal framework, and the strategic risk related to market developments in response to the environmental transition.

Two risk appetite indicators on transition climate risk are being integrated at Group level, subject to observation before a limit is defined. Within the Corporate & Investment Banking scope, the proportion of assets classified as "dark brown" according to the Green Weighting Factor method, which are the assets most exposed to transition risk, is monitored in the Global Financial Services Risk Appetite Framework. A threshold and a limit have been set from 2022.

THE STRESS TEST

In 2020, Groupe BPCE volunteered to participate in a first climate risk assessment exercise led by the European Banking Authority (EBA). Groupe BPCE also contributed to the pilot exercise conducted by the French Prudential Supervisory and Resolution Authority (ACPR) in 2021 to estimate the physical and transition risks. Lastly, in 2022 Groupe BPCE took part in the very first climate stress test launched by the European Central Bank (ECB).

The stated objective of this last exercise was to identify the preparedness of the hundred or so banking groups under supervision in the face of the financial and economic shocks that climate risk is likely to cause. This initiative was part of a desire already supported by the national supervisors.

This exercise should be seen as a joint learning exercise with pioneering features, aimed at strengthening the capacity of banks and supervisors to assess climate risk.

For this first learning exercise, the ECB wanted to simplify the request. The stress test targets specific categories of assets exposed to climate risks and not the full balance sheet of banks. The exercise is based on three modules:

- the first module covers the framework and governance of the approach;
- the second aims to collect a certain number of metrics in order to assess sector sensitivity;

- the third consists of estimating the short- and long-term impacts of physical and transition risks.

The physical risks only concern drought and floods on credit risk over a one-year horizon. For the transition risk, two types of scenarios are covered. One, short term; 3 years, concerns credit risk and market risk in the event of an unexpected and sudden carbon price shock. The second simulation consists of assessing the climate impact on our 30-year balance sheets, according to three scenarios: an orderly transition, in anticipation of the Paris Agreement in 2050; a disorderly transition, where no new policy is put in place until 2030, then a sudden and abrupt transition; and a scenario of no transition leading to significant global warming.

Groupe BPCE's participation in the 2022 climate stress test exercise demonstrated its ability to quantify climate risk under different scenarios. Groupe BPCE responded to this exercise with the quality of information and method praised by the ECB. It had to integrate a new sectoral dimension into its internal models over unprecedented time horizons of up to 30 years. Groupe BPCE also had to collect new data, such as energy performance assessments of homes given as guarantees, in order to carry out stress tests. This exercise led to the identification of areas for improvement to obtain data in a reliable and recurring manner. Lastly, this stress test enabled Groupe BPCE to quantify the main risks to which the Group is exposed and to prioritize actions to identify, mitigate and monitor these risks.

In terms of results, the metrics vary according to the types of risks and scenarios defined by the ECB.

The scenario more representative of physical risks is short-term flooding, due to the Group's home loan portfolio. This impact is also the corollary of the methodological framework used in terms of insurance coverage. Lastly, the insufficient granularity of certain data does not mitigate these results.

The short-term transition risk is increased due to the lack of energy performance data for the collateral backing Corporate exposures but remains limited overall because BPCE's exposure to the most carbon-intensive sectors is lower than the average of its peers.

As regards the long-term transition risk, due to this low exposure to the sectors identified as sensitive by the supervisor, the scenarios set do not impact BPCE in a very differentiated manner.

FINANCIAL AND MARKET RISKS

In terms of financial risks, an assessment of climate risks is carried out, among other things, through the management and monitoring of the liquidity reserve. Climate criteria and more broadly ESG criteria are taken into account in three areas: the environmental quality of the security, the ESG rating of issuers and a temperature analysis with the definition of an alignment objective in line with the Group's strategic plan.

With regard to private equity investments, work on the integration of ESG analysis criteria is underway in order to define ESG institution-investor profiles.

OPERATIONAL RISKS

RISKS RELATED TO OWN ACTIVITY

To anticipate physical weather events that could weigh on its own activities, Groupe BPCE has implemented a business continuity plan that defines the procedures and resources enabling the bank to deal with natural disasters in order to protect employees, key assets and activities, and to ensure the continuity of essential services. An internal tool makes it possible to identify sites and agencies exposed to climate risks and to monitor climate incidents.

REPUTATIONAL RISK

The evolution of consumer awareness and sensitivity to climate issues is a sensitivity factor for the banking sector that could lead to damage to the bank's reputation in the event of non-compliance with regulatory expectations or because the public, counterparties and/or investors associate Groupe BPCE with negative effects on the climate. A reputation measurement indicator incorporating climate-related events and more broadly ESG is being built by the Group's operational Risk department.

LEGAL, COMPLIANCE AND REGULATORY RISK

In order to limit the effects of climate change, the administrative and legislative authorities are adopting new regulations. These texts can be international (Paris Agreement), European (Taxonomy) or national (Climate and Resilience Act). For example, the French legislator has just strengthened its requirements with Article 29 of the Climate Energy Act. Indeed, financial companies must demonstrate how their investments are in line with a 1.5°C/2°C trajectory (see Paris Agreement).

The Legal department, in conjunction with the CSR department and the Group Risk division, organizes the information of the respective channels about this risk and ensures increased vigilance regarding the use of climate-related terminologies in order to be aligned with the European taxonomy.

CREDIT RISKS

For several years, ESG criteria have been included using tools and a framework whose development has accelerated with this climate risk management program. More specifically, the elements relating to the inclusion of ESG criteria are described below.

RISK CONTROL SYSTEM

Groupe BPCE is organizing itself to develop permanent and periodic risk controls. The permanent control systems will be detailed and specified during workshops to be conducted with the institutions. The objective will be to integrate climate elements into existing processes.

The periodic control is an internal guide for carrying out the assignments carried out in the various entities of the Group in the best possible way and in a consistent manner.

DASHBOARDS

Dashboards for monitoring and managing climate and environmental risks are being developed. The dashboard for the Group's scope was validated in early July 2022 and is built to ensure the reliability and quality of the data used. It must be made available to each entity on a quarterly basis.

DATA

A unified and standardized ESG data repository at Group level is being built. This project includes the implementation of ESG data governance at Group level. In this context, the needs of the Group Risk division are collected and satisfied by the acquisition of data from external suppliers or by the reprocessing of internal data.

2022 was marked by the publication of the first Green Asset Ratio in its eligible dimension. This exercise will be repeated in 2023 before an alignment publication in 2024.

The data expected under Pillar III ESG are the subject of a first publication with the submission of five "model" tables. These tables are as follows:

- Model 1: Banking portfolio – Indicators of transition risk potentially linked to climate change (credit quality of exposures by sector, issues and residual maturity)

At this stage, Groupe BPCE excludes information on Scope 3 emissions. The data relating to Scope 1 and 2 emissions were collected from data suppliers.

- Model 2: Banking portfolio – Indicators of transition risk potentially linked to climate change: Loans (information on the energy performance of loans secured by real estate assets)

Groupe BPCE uses a methodological approach in which the collection of energy performance assessment (EPA) data is mainly based on the EPAs collected from customers, the EPAs provided by the CSTB (Scientific and Technical Center for Building) and retrieved from ADEME database.

- Model 4: Banking portfolio – Indicators of transition risk potentially linked to climate change for counterparties among the 20 companies that emit the most carbon in the world

Groupe BPCE decided to feed model 4 from the list of the Climate Accountability Institute (1965-2018) due to its extensive scope. It is worth recalling that Groupe BPCE has adopted a net zero alignment strategy requiring the support of these counterparties in their transition efforts.

- Model 5: Banking portfolio – Indicators of physical risk potentially linked to climate change: Exposures subject to physical risk

Groupe BPCE feeds into this model by focusing on the exposure of residential real estate exposed to the risk of flooding. In the "Nomenclature of statistical territorial units" the risk of flooding related to housing has been qualified as high in accordance with the European Central Bank's classification of acute flood risks.

- Model 10: Other climate change mitigation measures not covered in regulation (EU) 2020/852 covering mitigation activities materialized by bonds and loans

Groupe BPCE used the classification of the product codes of commercial entities to identify green, sustainable and sustainability-related loans with a climate risk mitigation nature.

Integration of ESG issues into risk monitoring

The consideration of ESG risks is part of a global approach involving the business lines, CSR and Control functions. This approach includes the development and implementation of CSR policies in the most sensitive sectors, the definition of the excluded business sectors, the evaluation and monitoring of the ESG risks of transactions and counterparties *via* various tools and processes. Given the data available to date, the approach to climate risks is more detailed and is being built on the other dimensions.

ENVIRONMENTAL RISKS

ECONOMIC STRATEGY AND PROCESSES

At the heart of its concerns, the environmental transition is one of the three pillars of the BPCE 2024 strategic plan and is a priority for all its business lines and all its companies. Within this framework, Groupe BPCE has committed to a long-term change in its balance sheet as part of a strategy to mitigate the climate impact of its activities and its financed, invested or insured assets. It has made a strong commitment to society and its customers: to align its financing portfolios on a "Net Zero" trajectory and thus contribute to carbon neutrality by 2050. It is in this context that it joined the Net Zero Banking Alliance for its banking activities in July 2021, and in June 2022 the Net Zero Asset Owners Alliance for its insurance activities.

In its BPCE 2024 strategic plan, Groupe BPCE has set itself the following objectives:

- measure the climate impact and manage the climate trajectory of its financing, proprietary investment and insurance activities, within the reference framework of the Paris Agreement, by targeting the 1.5°C target and focusing as a priority on the most greenhouse gas-intensive sectors;
- support the energy transition of customers in their own transition challenges, whether in terms of financing, savings or insurance, with a dimension of advice and structured strategic dialog, providing expertise, solutions and a long-term vision.

The alignment measurement methodologies applied are based on current market standards, which are subject to change. Changes in the scope of our analyses of other Group activities thus depend on available and recognized methodologies. In addition, the objectives set by Groupe BPCE are conditioned by the commitments of our customers and their ability to meet them over time. These objectives are also contingent on current government policies and the development of low-carbon technologies, which are critical for long-term horizons.

The data used concerning our customers come mainly from data suppliers or company publications. The measurement estimates will change as the quality of the available data increases.

The Group is aware of the major challenge represented by the deterioration of natural capital and, through its subsidiary Natixis, was the first bank involved in the act4nature international initiative to communicate individual SMART commitments (specific, measurable, additional, relevant, temporally regulated) in June 2020. For several years, the Group and its subsidiaries have been committed to reinforcing their contributions to the UN Sustainable Development Goals (SDGs) and to increasingly contributing to the fight against climate change. The SDGs are a common language built around 17 global goals, broken down into 169 targets. As a result, Groupe BPCE's CSR strategy is fully committed to the integration of its SDGs in order to participate in the common journey to achieve a better and more sustainable future for all. Groupe BPCE is publicly committed to international standards such as the United Nations Global Compact, the UNEP FI and the NZBA. Its subsidiary Natixis is committed to the Equator Principles and Act4Nature.

Groupe BPCE has developed a proprietary methodology to analyze the climate and environmental impact of Corporate & Investment Banking transactions. This mechanism, called Green Weighting Factor (GWF), assigns each transaction a rating, represented by a color, on a scale of 7 levels ranging from (activities having an extremely harmful effect on the climate and the environment) to dark green (activities having a very positive impact). This rating is based on an assessment of the impact of the financing on the climate and also takes into account – when they are significant – its main non-climate environmental externalities (water, pollution, waste, biodiversity).

In order to limit the climate impact of its financing and investment activities, Groupe BPCE is withdrawing from the highest-emitting activities (such as the coal, oil and gas sectors) by implementing appropriate exclusion policies. With regard to retail banking activities, an offer dedicated to mitigating environmental impacts has been launched with green loans for renovation projects, electric vehicles or green partnerships.

GOVERNANCE

The Group's Supervisory Board approves the climate-related strategic orientations, oversees their implementation and manages the risks and opportunities associated with these challenges with the help of two independent specialized committees.

The Chairman of the Management Board and the members of the Executive Management Committee oversee the implementation and monitoring of the strategy and ensure compliance with regulatory requirements. Groupe BPCE's Executive Management is committed to developing and implementing its climate strategy and to identifying, assessing and managing the risks related to climate change.

Groupe BPCE has set up an organization around its CSR and Risk departments in all its business lines and companies in order to respond to the challenges posed by climate change. The Risk division and General Secretariat, in charge of compliance and permanent control, measure, monitor and manage the risks faced by Groupe BPCE.

The Supervisory Board is also attentive to the integration of ESG issues in the method and amount of remuneration granted to each member of the Executive Board. The Remuneration Committee ensures that CSR issues are an integral part of the remuneration policy. For the 2021 fiscal year, the remuneration awarded to the Chairman and members of the BPCE Management Board includes an annual variable portion, of which 40% is indexed to qualitative criteria, of which 10% is linked to the achievement of CSR-related criteria. The allocation of this variable portion depends on the implementation of the Group's strategic ambitions on environmental issues (including climate issues) and the positioning of Groupe BPCE in the rankings of non-financial rating agencies.

RISK MANAGEMENT FRAMEWORK

The materiality of risks related to climate change is assessed at Group level according to a short- and long-term horizon according to the main risk categories of Pillar I of Basel III, which are: credit risk, market risk and operational risk, including non-compliance risks.

Groupe BPCE has developed a methodology for classifying risks by sector based on climate and environmental criteria. Analyses based on scientific research conducted by French institutions (*Haut Conseil pour le Climat*, ADEME, etc.) as well as by European and international organizations (IPCC, IEA, etc.) made it possible to define the exposure of Groupe BPCE's portfolio to sectors identified as "sensitive" (reference scenario of the ACPR climate pilot exercise).

As a signatory of the Equator Principles, Corporate & Investment Banking applies a market methodology recognized by member banks and institutions to ensure in particular the identification, assessment and management of the environmental risks of the financed projects. Since October 2020, the bank has applied the fourth version of the Equator Principles (EP IV Amendment), which reinforces the integration of climate change in the environmental impact analysis of major projects. The borrower is therefore required to: 1) assess the physical risks associated with climate change for most projects, 2) carry out an assessment of the climate transition risks and an analysis of less greenhouse gas intensive alternatives for projects with CO_2 equivalent emissions of at least 100,000 metric tons per year in total. Depending on the risks identified and the nature of the associated impacts, mitigation measures are requested of the customer. They are covered by specific clauses in the financial documentation ("covenants").

For its Corporate & Investment Banking business, Groupe BPCE has also deployed an additional tool (ESR Screening) to identify, assess and monitor the environmental, social and governance (ESG) risks of its corporate customers. This tool makes it possible to identify the customers most at risk and analyze them in depth. Climate and environmental risks are fully integrated into the system.

For retail banking, in order to increase the integration of climate and environmental criteria, a questionnaire dedicated to the consideration of ESG issues has been created for corporate customers. This questionnaire is intended to be used by customer service managers to collect information on customer knowledge, actions and commitment in terms of climate and the environment. The ESG questionnaire will be rolled out in the course of 2023.

Since 2020, an analysis of climate risks has also been applied to the Group's liquidity reserve.

With regard to environmental risk measures:

- the macro-risk mapping includes climate risks in the "strategic, commercial and ecosystem risks" category;
- the Green Weighting Factor (GWF) rating methodology was finalized in 2019 for all sectors financed by Natixis, with the exception of the financial sector;
- stress tests on climate risks using specific parameters and periods have been developed since the first exercise carried out in 2021 using ACPR methodologies.

Given the evolving framework of knowledge related to climate risks and the availability of internal and external data, the tools and methodologies deployed are subject to regular reviews of their adequacy and continuous improvement work.

Since 2021, Groupe BPCE has published its public report on the climate in line with the TCFD recommendations for financial institutions.

SOCIAL RISKS

ECONOMIC STRATEGY AND PROCESSES

For several years, the Group and its subsidiaries have been committed to strengthening their contributions to the UN Sustainable Development Goals (SDGs). The Group's sustainable development policy focuses on the following SDGs:

- transparency and cooperative model (SDG 16);
- banking inclusion (SDGs 1 and 10);
- local presence (SDG 11);
- objectives in favor of gender equality and disability.

Groupe BPCE has launched a range of dedicated financing offers, called Impact Loans, aimed at rewarding customers who achieve social performance objectives. Launched last year with operators, the Impact Loan was extended in 2021 to long-term investors, thus covering all professional real estate customers.

In particular, Groupe BPCE has developed CSR sectoral policies in its corporate & investment banking activities covering sectors with major social challenges such as the defense and tobacco industries.

GOVERNANCE

Since 2019, Groupe BPCE's overall risk policy, implemented in sectoral policies, incorporates social criteria. These criteria are updated regularly at each sector policy review by the Non-Financial Risk Committee (CoREFi), and then validated at the Sector Watch Committee led by the Credit Risk department. These criteria include, among others, labor standards, customer protection, product liability and human rights.

This sectoral implementation of risk monitoring is then shared with all Group institutions.

The Group Risk Management department measures and controls compliance with risk management systems concerning social factors at the level of the Group's institutions for the Risk Committee

As for environmental risks, Groupe BPCE's remuneration policy provides for an annual variable portion for the Chairman and members of the BPCE Management Board, of which 40% is indexed to qualitative criteria, of which 10% is linked to the achievement of criteria related to CSR. The allocation of this variable portion depends on the implementation of the Group's strategic ambitions related to environmental issues (including climate change) and on Groupe BPCE's position in the rankings established by non-financial rating agencies, including social objectives.

RISK MANAGEMENT FRAMEWORK

As part of the development of integrated ESG risk management, Groupe BPCE is developing tools and methodologies to take social risks into account. The analysis of social risks is mainly carried out qualitatively: – for example, by analyzing controversies associated with transactions,

- through the implementation of exclusion policies;
- through the use of sector analysis tools (such as the ESR screening tool).

Groupe BPCE's methodology, developed by the Group's Climate Risk department, for assessing social risks focuses on four social criteria: customers, workers, suppliers and civil society. The social risk management framework is based on international standards, such as the International Labour Organization (ILO), national data from the Ministry of Labor, the Ministry for the Ecological Transition and the French Agency for Ecological Transition. Based on these principles, the sector analyses highlight the specific issues to be monitored during the creation and monitoring process.

The sensitivity of the exposures to social risks is then identified by sector and sub-sector.

As a signatory of the Equator Principles, Corporate & Investment Banking applies a market methodology to ensure that projects are developed in a socially responsible manner. In this respect, the Bank ensures that it fulfills its responsibility to respect human rights in accordance with the United Nations Guiding Principles on Business and Human Rights.

For its Corporate & Investment Banking business, Groupe BPCE has also deployed an additional tool (ESR Screening) to identify, assess and monitor the environmental, social and governance (ESG) risks of its corporate customers. This tool makes it possible to identify the customers most at risk and analyze them in depth. Social/societal risks are fully integrated into the system.

Lastly, when entering into a relationship and throughout the relationship Corporate & Investment Banking takes into account any potential controversies that its customers may encounter. This approach is an integral part of Groupe BPCE's due diligence on its customers. In the event of significant shortcomings, Groupe BPCE looks for the cause and works with the customer to find an acceptable solution as soon as possible. In the absence of an acceptable solution, Groupe BPCE may decide of its own accord not to enter into a relationship or not to renew its commitments with the customer.

The social risk and cases that trigger escalation and exclusion are covered by the commitments formulated in its Code of Conduct, its adherence to the Global Compact, its duty of vigilance plan and its responsible purchasing policy, or its adherence to the Business for Inclusive Growth (B4IG).

Whereas the links with social risks are not clearly defined in the current risk management framework, the ESG risks are correctly identified in the risk framework under investment and credit risk sub-categories.

GOVERNANCE RISK

GOVERNANCE

Groupe BPCE's CSR strategy is conducted in compliance with business ethics with a total commitment to managing legal, regulatory and ethical risks. This is reflected in a Group Code of Conduct and Ethics approved by the Board in 2018 and a rigorous tax policy with a Tax Code of Conduct approved in 2021.

Since 2019, Groupe BPCE's overall risk policy, implemented in sectoral policies, incorporates governance criteria. These criteria are updated regularly at each sector policy review by the Non-Financial Risk Committee (CoREFi), and then validated at the Sector Watch Committee led by the Credit Risk department.

RISK MANAGEMENT FRAMEWORK

The methodology used in risk management taking into account the performance of governance is organized according to four aspects: business ethics, CSR strategy, shareholder democracy and the practices and processes implemented to direct and control the management of customer risks. The sectoral policies, including the consideration of governance, are thus drawn up on the basis of analyses based on these criteria.

The systems described above, such as sectoral policies, exclusion policies, ESR screening tools, the Equator Principles, and the analysis of controversies, also take into account the analysis of governance risks.

14.3 Detailed quantitative disclosures

Data published under Pillar III ESG

TEMPLATE 1: BANKING BOOK- CLIMATE CHANGE TRANSITION RISK: CREDIT QUALITY OF EXPOSURES BY SECTOR, EMISSIONS AND RESIDUAL MATURITY

Notes on methodology: NACE codes were used to precisely identify the counterparties included in each sector.

		31/12/2022															
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Gross carrying amount *(in millions of euros)*					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions *(in millions of euros)*			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) *(in tons of CO_2 equivalent)*							
	Sector/subsector		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM)	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures		Of which Scope 3 financed emissions	GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
1	**Exposures towards sectors that highly contribute to climate change***																
2	A - Agriculture, forestry and fishing	5,089			1,719	324	(316)	(119)	(186)	1,552		1	2,596	1,260	1,184	50	7
3	B - Mining and quarrying	4,020	1,840		1,310	309	(124)	(14)	(111)	679 984		1	3,060	685	177	98	4
4	B.05 - Mining of coal and lignite																
5	B.06 - Extraction of crude petroleum and natural gas	1,594	1,276		666	8	(10)	(5)	(5)	258 276		3	1,357	150	87		1
6	B.07 - Mining of metal ores	992	38		175	123	(17)	(1)	(15)	153 363			657	279	31	25	6
7	B.08 - Other mining and quarrying	435	20		163	20	(18)	(5)	(13)	25,563			280	126	27	1	4
8	B.09 - Mining support service activities	999	506		306	158	(80)	(2)	(79)	242 781			766	129	32	73	7
9	C - Manufacturing	23,697	828		4,329	1,606	(896)	(117)	(727)	1,725 298		8	17,669	1,991	3,617	421	4
10	C.10 - Manufacture of food products	4,120			627	326	(226)	(33)	(178)	180			2,867	521	681	51	4
11	C.11 - Manufacture of beverages	1,217			331	34	(34)	(15)	(16)	113			886	97	216	17	3
12	C.12 - Manufacture of tobacco products																

		31/12/2022															
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Gross carrying amount *(in millions of euros)*					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions *(in millions of euros)*			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) *(in tons of CO_2 equivalent)*							
	Sector/subsector		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM)	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures		Of which Scope 3 financed emissions	GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
13	C.13 - Manufacture of textiles	483			24	14	(10)	(1)	(7)	1,336		6	391	23	67	1	3
14	C.14 - Manufacture of wearing apparel	156			37	31	(18)	(1)	(16)	10		4	119	5	29	3	5
15	C.15 - Manufacture of leather and related products	174			10	4	(3)		(2)				144	5	25		1
16	C.16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	723			106	54	(33)	(3)	(28)	3,116		4	468	120	127	8	4
17	C.17 - Manufacture of pulp, paper and paperboard	280			32	12	(8)	(1)	(7)	26,511			188	53	38	1	4
18	C.18 - Printing and service activities related to printing	553			105	44	(22)	(2)	(19)				446	33	70	4	4
19	C.19 - Manufacture of coke oven products	814	698		269	24	(11)	(1)	(9)	278 262		9	407	215	166	25	6
20	C.20 - Production of chemicals	1,153	9		146	32	(22)	(3)	(17)	217 969		1	882	114	151	7	3
21	C.21 - Manufacture of pharmaceutical preparations	851			153	143	(24)	(3)	(19)	476			661	12	177	1	2
22	C.22 - Manufacture of rubber products	825			112	44	(25)	(3)	(20)	863		3	589	98	133	5	4
23	C.23 - Manufacture of other non-metallic mineral products	670			155	40	(31)	(6)	(22)	311 584		12	472	77	109	12	5
24	C.24 - Manufacture of basic metals	1,062			145	20	(13)	(2)	(10)	321 767		8	893	30	130	9	3
25	C.25 - Manufacture of fabricated metal products, except machinery and equipment	2,269			492	229	(108)	(14)	(89)	4,618		1	1,707	210	330	22	4
26	C.26 - Manufacture of computer, electronic and optical products	1,025			93	38	(21)	(1)	(18)	3,056		1	853	25	138	8	2

		31/12/2022															
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Gross carrying amount *(in millions of euros)*					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions *(in millions of euros)*			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) *(in tons of CO_2 equivalent)*							
	Sector/subsector		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM)	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures		Of which Scope 3 financed emissions	GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
27	C.27 - Manufacture of electrical equipment	781	74		164	80	(57)	(3)	(53)	46,682		7	581	73	102	24	4
28	C.28 - Manufacture of machinery and equipment n.e.c.	1,331			153	92	(66)	(4)	(60)	85,166		33	1,085	41	181	24	4
29	C.29 - Manufacture of motor vehicles, trailers and semi-trailers	1,752			590	141	(57)	(7)	(48)	50,308		53	1,482	34	213	24	2
30	C.30 - Manufacture of other transport equipment	732	47		181	68	(39)	(6)	(32)	70,406		2	442	110	171	8	3
31	C.31 - Manufacture of furniture	261			46	33	(13)	(1)	(11)				194	22	43	2	4
32	C.32 - Other manufacturing	1,799			246	45	(24)	(2)	(20)	302 661			1,397	23	223	156	7
33	C.33 - Repair and installation of machinery and equipment	664			111	55	(31)	(3)	(26)	214			515	49	94	6	4
34	D - Electricity, gas, steam and air conditioning supply	10,974	1,380		1,709	226	(132)	(68)	(67)	1,995 107		5	4,588	1,655	4,218	512	7
35	D35.1 - Electric power generation, transmission and distribution	10,038	682		1,292	226	(116)	(54)	(67)	1,670 317		3	4,213	1,433	3,880	511	7
36	D35.11 - Production of electricity	9,386	638		1,154	172	(105)	(45)	(61)	1,607 555		4	3,872	1,334	3,701	480	7
37	D35.2 - Manufacture of gas; distribution of gaseous fuels through mains	797	655		362		(13)	(10)		307 807		31	353	193	250		6
38	D35.3 - Steam and air conditioning supply	139	43		55		(4)	(4)		16,982			22	29	88	1	10
39	E - Water supply; sewerage, waste management and remediation activities	1,609			204	45	(35)	(6)	(26)	46,098		7	840	236	419	114	8
40	F - Construction	18,350	1		4,258	1,329	(841)	(160)	(624)	73;268		3	13,473	1,058	2,394	1,425	9

		31/12/2022															
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Gross carrying amount *(in millions of euros)*					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions *(in millions of euros)*			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) *(in tons of CO_2 equivalent)*							
	Sector/subsector		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM)	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures		Of which Scope 3 financed emissions	GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity
41	F.41 - Construction of buildings	9,038			1,537	534	(409)	(71)	(300)	8,415		2	5,617	500	1,668	1,253	13
42	F.42 - Civil engineering	2,804	1		447	96	(47)	(8)	(33)	55,128		16	2,235	197	296	76	5
43	F.43 - Specialized construction activities	6,508			2,274	699	(385)	(80)	(290)	9,725			5,622	361	430	96	4
44	G - Wholesale and retail trade; repair of motor vehicles and motorcycles	35,252	701		6,460	2,116	(1,380)	(248)	(1,051)	566 406		1	24,748	3,669	6,006	829	4
45	H - Transportation and storage	8,645	392		2,336	456	(279)	(65)	(170)	1,602 396		9	5,697	1,084	1,790	74	5
46	H.49 - Land transport and transport via pipelines	4,668	334		1,091	217	(132)	(37)	(70)	515 921		2	3,322	449	834	63	5
47	H.50 - Water transport	756			131	119	(49)	(9)	(35)	12,098			500	134	119	2	4
48	H.51 - Air transport	1,200			801	49	(52)	(15)	(31)	1,051 451		55	839	185	174	2	4
49	H.52 - Warehousing and support activities for transportation	2,010	59		312	71	(45)	(3)	(34)	22,926		1	1,028	315	661	6	6
50	H.53 - Postal and courier activities	12			2	1							10		1		5
51	I - Accommodation and food service activities	11,299			4,405	934	(786)	(330)	(402)	105 575		1	6,543	2,060	2,453	244	7
52	L - Real estate activities	121 112	12		18,514	2,357	(2,204)	(988)	(1,101)	161 795		2	32,611	22,367	55,935	10,200	12
53	**Exposures towards sectors other than those that highly contribute to climate change***																
54	K - Financial and insurance activities	32,205	650		5,126	941	(868)	(219)	(604)	1,547 425		1	22,842	5,458	3,188	717	5
55	Exposures to other sectors (NACE codes J, M - U)	54,196	40		8,089	2,918	(1,703)	(303)	(926)	3,646 993		4	32,334	7,183	12,769	1,910	5
56	**TOTAL**	**326 448**	**5,844**		**58,461**	**13,562**	**(9,565)**	**(2,636)**	**(5,994)**	**12,151 898**			**167,000**	**48,704**	**94,150**	**16,594**	

	31/12/2022															
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
	Gross carrying amount *(in millions of euros)*					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions *(in millions of euros)*			GHG financed emissions (scope 1, scope 2 and scope 3 emissions of the counterparty) *(in tons of CO_2 equivalent)*							
Sector/subsector		Of which exposures towards companies excluded from EU Paris-aligned Benchmarks in accordance with points (d) to (g) of Article 12.1 and in accordance with Article 12.2 of Climate Benchmark Standards Regulation	Of which environmentally sustainable (CCM)	Of which stage 2 exposures	Of which non-performing exposures		Of which Stage 2 exposures	Of which non-performing exposures		Of which Scope 3 financed emissions	GHG emissions (column i): gross carrying amount percentage of the portfolio derived from company-specific reporting	<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity

* In accordance with the Commission delegated regulation EU) 2020/1818 supplementing regulation (EU) 2016/1011 as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks -Climate Benchmark Standards Regulation - Recital 6: Sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006

TEMPLATE 2: BANKING BOOK - CLIMATE CHANGE TRANSITION RISK: LOANS COLLATERALIZED BY IMMOVABLE PROPERTY - ENERGY EFFICIENCY OF THE COLLATERAL

		31/12/2022															
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		Total gross carrying amount amount *(in millions of euros)*															
			Level of energy efficiency (EP score in kWh/m² of collateral)						Level of energy efficiency (EPC label of collateral)							Without EPC label of collateral	
	Counterparty sector		0; <= 100	> 100; <= 200	> 200; <= 300	> 300; <= 400	> 400; <= 500	> 500	A	B	C	D	E	F	G		Of which level of energy efficiency (EP score in kWh/m² of collateral) estimated
1	**TOTAL EU AREA**	**422,257**	**49,602**	**132,951**	**70,830**	**24,747**	**14,903**	**1,343**	**6,051**	**42,492**	**49,147**	**93,181**	**63,323**	**24,502**	**14,948**	**128,613**	**732**
2	Of which Loans collateralized by commercial immovable property	47,175	261	1,020	584	174	182	138	96	143	319	555	361	183	160	45,359	543
3	Of which Loans collateralized by residential immovable property	343,014	47,633	126,748	67,141	23,327	13,857	1 091	5,699	41,100	46,959	88,895	60,249	23,041	13,860	63,211	(7)
4	Of which Collateral obtained by taking possession: residential and commercial immovable properties																
5	Of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	205,354	35,159	98,762	42,871	16,185	12,377										
6	**TOTAL NON-EU AREA**	**5 370**	**325**	**664**	**324**	**107**	**53**	**6**	**30**	**289**	**253**	**427**	**301**	**121**	**57**	**3,891**	
7	Of which Loans collateralized by commercial immovable property	1,334														1,334	
8	Of which Loans collateralized by residential immovable property	3,206	319	653	320	104	52	6	30	284	251	418	297	119	56	1 752	
9	Of which Collateral obtained by taking possession: residential and commercial immovable properties																

14

	Counterparty sector	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
		31/12/2022															
		Total gross carrying amount amount *(in millions of euros)*															
		Level of energy efficiency (EP score in kWh/m² of collateral)							Level of energy efficiency (EPC label of collateral)							Without EPC label of collateral	
			0; <= 100	> 100; <= 200	> 200; <= 300	> 300; <= 400	> 400; <= 500	> 500	A	B	C	D	E	F	G		Of which level of energy efficiency (EP score in kWh/m² of collateral) estimated
10	Of which Level of energy efficiency (EP score in kWh/m² of collateral) estimated	984	245	456	178	67	38										

TEMPLATE 4: BANKING BOOK - CLIMATE CHANGE TRANSITION RISK: EXPOSURES TO TOP 20 CARBON-INTENSIVE FIRMS

	a	b	c	d	e
	31/12/2022				
	Gross carrying amount (aggregate)	Gross carrying amount towards the counterparties compared to total gross carrying amount (aggregate)*	Of which environmentally sustainable (CCM)	Weighted average maturity	Number of top 20 polluting firms included
1	982	0.082 %		2.553615	8

* For counterparties among the top 20 carbon emitting companies in the world

TEMPLATE 5: BANKING BOOK - CLIMATE CHANGE PHYSICAL RISK: EXPOSURES SUBJECT TO PHYSICAL RISK

	31/12/2022														
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount *(in millions of euros)*													
			of which exposures sensitive to impact from climate change physical events												
			Breakdown by maturity bucket					of which exposures sensitive to impact from chronic climate change events	of which exposures sensitive to impact from acute climate change events	of which exposures sensitive to impact both from chronic and acute climate change events	Of which Stage 2 exposures	Of which non-performing exposures	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		
	Variable: Geographical area subject to climate change physical risk - acute and chronic events		<= 5 years	> 5 year <= 10 years	> 10 year <= 20 years	> 20 years	Average weighted maturity							of which Stage 2 exposures	Of which non-performing exposures
1	A - Agriculture, forestry and fishing														
2	B - Mining and quarrying														
3	C - Manufacturing														
4	D - Electricity, gas, steam and air conditioning supply														
5	E - Water supply; sewerage, waste management and remediation activities														
6	F - Construction														
7	G - Wholesale and retail trade; repair of motor vehicles and motorcycles														
8	H - Transportation and storage														
9	L - Real estate activities														
10	Loans collateralized by residential immovable property	346,220	95	286	1,109	771	17	2,261		2,261	383	9	(11)	(8)	(2)
11	Loans collateralized by commercial immovable property														
12	Repossessed collaterals														
13	Other relevant sectors (breakdown below where relevant)														

TEMPLATE 10 - OTHER CLIMATE CHANGE MITIGATING ACTIONS THAT ARE NOT COVERED IN THE EU TAXONOMY

	31/12/2022					
	a	b	c	d	e	f
	Type of financial instrument	Type of counterparty	Gross carrying amount *(in millions of euros)*	Type of risk mitigated (Climate change transition risk)	Type of risk mitigated (Climate change physical risk)	Qualitative information on the nature of the mitigating actions
1	Bonds (e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Financial corporations	58			
2		Non-financial corporations	174			
3		Of which Loans collateralized by commercial immovable property				
4		Households				
5		Of which Loans collateralized by residential immovable property				
6		Of which building renovation loans				
7		Other counterparties	1,997			
8	Loans (e.g. green, sustainable, sustainability-linked under standards other than the EU standards)	Financial corporations	159			
9		Non-financial corporations	2,229			
10		Of which Loans collateralized by commercial immovable property	136			
11		Households	349			
12		Of which Loans collateralized by residential immovable property				
13		Of which building renovation loans				
14		Other counterparties				

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REMUNERATION POLICY

Information on the policies and practices on pay granted to members of the executive body and persons whose professional activities have a material impact on the corporate risk profile are available at the following address:

https://groupebpce.com/en/investors/results-and-publications/pillar-iii

16

INTERNAL CONTROL POLICY AND CERTIFICATION

16.1 Internal control policy

General organization of permanent control

The internal control system defined by the Group contributes to the control of risks of all kinds and is governed by an umbrella charter – the Group Internal Control Charter – which stipulates that this system is designed, in particular, to ensure "[...] the reliability of financial and non-financial information reported both inside and outside the Group". In this context, the Group has defined and put in place a permanent control system to ensure the quality of the accounting and financial information in accordance with the requirements defined by the order of November 3, 2014 on internal control and all other regulatory obligations relating to the quality of reporting (in particular those resulting from Recommendation No. 239 issued on January 9, 2013 by the Basel Committee on Banking Supervision regarding the implementation of the "Principles for aggregating risk data and risk notification" or from the application of CRR 2).

This system is based on two levels of controls to ensure strict independence, with:

- the first level exercised by all those involved in the production and reporting process. For Pillar III, the people involved in the process come mainly from the Risk and Finance functions and are coordinated by the Finance & Strategy division (Institutional Financial Communication);
- the second level is handled by independent units within the Risk, Compliance or Permanent Control functions. For Pillar III, this work is carried out by the Risk division (Risk Governance) and the Group General Secretariat (Group Financial Control).

Pillar III first-level production and control system

Included in the list of main reports published by BPCE (Reports booklet), Pillar III is governed by provisions strictly defined by the Group (in particular the Framework for the preparation and publication of reports and management indicators) aimed at strengthening the environment for producing, controlling and publishing the report and the quality of its underlying indicators.

In addition to the documentation and self-checking procedures or controls, whose drafting and implementation are the responsibility of the various contributors to the Pillar III report, the Finance and Strategy division has put in place a detailed mapping of the roles and responsibilities involved in the implementation of controls. It has also developed an automated inter-reports control tool comprising nearly 800 controls intended to ensure the consistency between the information appearing in Pillar III and that appearing in other reports (and in particular those provided to the control and regulatory authorities such as the COmmon solvency ratio REPorting and the FINancial REPorting).

Pillar III second-level control system

The Group has defined a system to ensure that the main reports published within the Group comply with all regulatory obligations. This system is implemented as part of a review carried out by independent functions and aims to ensure that reports are prepared in a secure production environment and that they include reliable, clear, useful and auditable data.

The review of the Pillar III report is carried out by the Risk division (Risk Governance) and the Group General Secretariat (Group Financial Control) as part of a global approach, based in particular on the implementation of a standard assessment grid to carry out the review in a documented manner and subject it to validation according to strict criteria. Based on the scoring method, the grid is composed of 33 standard controls grouped into six analysis criteria (Documentation, Organization, Auditability, Clarity, Controls and Accuracy) rated on a scale between 1 (requirement not met) and 4 (Requirement fully met), with an average of 2.5.

For the first assessment exercise, the controls were mainly carried out on the basis of an analysis of the documentation and controls made available by the contributing business lines and by carrying out consistency checks on the production of the Pillar III report of June 30, 2021 (text and main indicators monitored in the context of the risk appetite). Additional controls will continue after publication, as part of a continuous improvement approach and permanent system.

16.2 Statement on the publication of information required under Pillar III

I certify that, to the best of my knowledge, the disclosures provided in this document in relation to Pillar III comply with part 8 of CRR Regulation (EU) No. 575/2013 (and subsequent modifications) and have been prepared in accordance with the internal control framework agreed at BPCE management body level.

Paris, March 24, 2023

Nicolas Namias

Chairman of the BPCE Management Board

17

ANNEXES

17.1 Index to Pillar III report tables

17.2 Pillar III cross-reference table

CRR Article	Topic	Pillar III report reference	Pillar III report pages
435	Objectives and risk management policy	4 Governance and risk management system	24-40
436	Scope of consolidation	3 Capital management and capital adequacy	44 ; 57-77
437	Capital	3 Capital management and capital adequacy	46-50 ; 73-76
438	Capital requirements	3 Capital management and capital adequacy	51-52
439	Exposure to counterparty credit risk	6 Counterparty risk	156-168
440	Capital buffers	3 Capital management and capital adequacy	42-43 ; 79
441	Global systemically important indicators	BPCE website – Investment/regulated information section Regulatory publications	
442	Credit risk adjustments	5 Credit risk	91-93 ; 107-113
443	Encumbered assets	9 Liquidity risk	225-228
444	Use of external credit rating agencies	5 Credit risk	98-100
445	Exposure to market risk	8 Market risks	194-205
446	Operational risk	11 Operational risk	244-248
447	Banking book equity exposures	5 Credit risk	151-153
448	Exposure to interest rate risk for banking book positions	9 Liquidity, interest rate and foreign exchange risks	217-218
449	Exposure to securitization positions	7 Securitization transactions	170-191
449 bis	Prudential information on ESG risks	14 Climate Risks	256-272
450	Remuneration policy	BPCE website – Investment/regulated information section Other information	
451	Leverage	3 Capital management and capital adequacy	54 ; 82-83
452	Use of the IRB approach for credit risk	5 Credit risk	94-100
453	Use of credit risk mitigation techniques	5 Credit risk	94-100 ; 122-125
454	Use of advanced measurement approaches for operational risk	11 Operational risk	N/A
455	Use of internal market risk models	8 Market risks	194-196 ; 200-205
458	Macroprudential supervision measures	3 Capital management and capital adequacy	79-80

17.3 Glossary

Acronyms

EBA	The European Banking Authority, established by EU regulation on November 24, 2010. It came into being on January 1, 2011 in London, superseding the Committee of European Banking Supervisors (CEBS). This new body has an expanded mandate. It is in charge of harmonizing prudential standards, ensuring coordination among the various national supervisory authorities and performing the role of mediator. The goal is to establish a Europe-wide supervision mechanism without compromising the ability of the national authorities to conduct the day-to-day supervision of credit institutions.
ABS	See securitization
ACPR	*Autorité de contrôle prudentiel et de résolution* (ACPR): French prudential supervisory authority for the banking and insurance sector (formerly the CECEI, or *Comité des établissements de crédit et des entreprises d'investissement/*Credit Institutions and Investment Firms Committee)
AFEP-MEDEF	*Association française des entreprises privées – Mouvement des entreprises de France*/French Association of Private Sector Companies – French Business Confederation
AFS	Available For Sale
ALM	Asset/Liability management
AMF	*Autorité des marchés financiers* (AMF), the French financial markets authority
AT1	Additional Tier 1
BCBS	Basel Committee on Banking Supervision, an organization comprised of the central bank governors of the G20 countries, tasked with strengthening the global financial system and improving the efficacy of prudential supervision and cooperation among bank regulators.
ECB	European Central Bank
EIB	European Investment Bank
BMTN	Negotiable medium-term notes
BRRD	Banking Recovery and Resolution Directive
CCF	Credit Conversion Factor
CDO	See securitization
CDPC	Credit Derivatives Products Company, *i.e.* a business specializing in providing protection against credit default through credit derivatives
CDS	Credit Default Swap, a credit derivative contract under which the party wishing to buy protection against a credit event (*e.g.* counterparty default) makes regular payments to a third party and receives a pre-determined payment from this third party should the credit event occur.
LTD	Loan-to-Deposit ratio, i.e. a liquidity indicator that enables a credit institution to measure its autonomy with respect to the financial markets
CLO	See securitization
CMBS	See securitization
CEGC	Compagnie Européenne de Garanties et de Cautions
CET1	Common Equity Tier 1
CFP	Contingency Funding Plan
CNCE	Caisse Nationale des Caisses d'Epargne
CPM	Credit Portfolio Management
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment: the expected loss related to the risk of default by a counterparty. The CVA aims to take into account the fact that the full market value of the transactions may not be recovered. The method for determining the CVA is primarily based on the use of market inputs in connection with the practices of market professionals.
CVaR	Credit Value at Risk, *i.e.* the worst loss expected to be suffered after eliminating the 1% worst-case scenarios, used to determine individual counterparty limits.
DVA	Debit Valuation Adjustment, symmetrical to the CVA. Represents the expected loss, from the counterparty's perspective, on valuations of derivative liabilities. It reflects the impact of the entity's own credit quality on the valuation of these instruments.
EAD	Exposure at Default, *i.e.* the amount owed by the customer at the effective default date. It is the sum of the remaining principal, past due payments, accrued interest not yet due, fees and penalties.
OFR	Own Funds Requirements: *i.e.* 8% of risk-weighted assets (RWA)
EL	Expected Loss, *i.e.* the value of the loss likely to be incurred given the quality of the structure of the transaction and any measures taken to mitigate risk, such as collateral. It is calculated by multiplying Exposure at Risk (EAD) by Probability of Default (PD) and by Loss Given Default (LGD).
DVA	Debit Valuation Adjustment, symmetrical to the CVA. Represents the expected loss, from the counterparty's perspective, on valuations of derivative liabilities. It reflects the impact of the entity's own credit quality on the valuation of these instruments.
EURIBOR	Euro Interbank Offered Rate, the benchmark interest rate on the Euro zone's money market
FBF	*Fédération bancaire française* (French Banking Federation), a professional body representing all banking institutions in France
FCPR	*Fonds commun de placement à risque*/Venture capital investment fund
FGAS	*Fonds de garantie à l'accession sociale*/French State guarantee fund for subsidized loans

Acronyms

FINREP	FINancial REPorting
SRF	Single Resolution Fund
FSB	The Financial Stability Board: whose mandate is to identify vulnerabilities in the global financial system and to implement principles for regulation and supervision in the interest of financial stability. Its members are central bank governors, finance ministers and supervisors from the G20 countries.
GAP	Asset/Liability management
G-SIBs	Global Systemically Important Banks are financial institutions whose distress or failure, because of their size, complexity and systemic inter-dependence, would cause significant disruption to the financial system and economic activity. These institutions meet the criteria established by the Basel Committee and are identified in a list published in November 2011 and updated every year. The constraints applicable to G-SIBs increase with their level of capital.
HQLA	High-Quality Liquid Assets
Non-life insurance policies (IARD)	*Incendie, accidents et risques divers*/property and casualty Insurance
IASB	International Accounting Standards Board
ICAAP	Internal Capital Adequacy Assessment Process: a process required under Pillar II of the Basel Accords to ensure that firms have sufficient capital to cover all their risks.
ILAAP	Internal Liquidity Adequacy Assessment Process: Process provided for in Pillar II of the Basel Accords through which the Group ensures the adequacy of its liquidity level and its management with regard to all its liquidity risks.
IFRS	International Financial Reporting Standards
IRB	Internal-Ratings Based: an approach to capital requirements based on the financial institution's internal rating systems.
IRBA	Advanced IRB approach
IRBF	Foundation IRB approach
IRC	Incremental Risk Charge: the capital requirement for an issuer's credit migration and default risks, covering a period of one year for fixed income and loan instruments in the trading book (bonds and CDSs). The IRC is a 99.9% Value at Risk measurement; *i.e.* the greatest risk obtained after eliminating the 0.1% worst-case scenarios.
L&R	Loans and receivables
LCR	Liquidity Coverage Ratio: a measurement introduced to improve the short-term resilience of banks' liquidity risk profiles. The LCR requires banks to maintain a reserve of risk-free assets that can be converted easily into cash on the market in order to cover its cash outflows minus cash inflows over a 30-day stress period without the support of central banks.
LBO	Leveraged Buyout
AML-CTF	Anti-Money Laundering and Counter Terrorism Financing
LGD	Loss Given Default, a Basel II credit risk indicator corresponding to loss in the event of default
MDA	Maximum Distributable Amount, a new provision for banks placing restrictions on their dividend, Additional Tier 1 coupon and bonus payments (under a rule that tightens restrictions as banks deviate from their requirements), if the capital buffers are not met. As these buffers are on top of Pillars I and II, they apply immediately if the bank fails to comply with the combined requirements.
SSM	Single Supervisory Mechanism
MREL	Minimum Requirement for own funds and Eligible Liabilities
MRU	Single Resolution Mechanism
NPE	Non-Performing Exposure
NPL	Non-Performing Loan
NSFR	Net Stable Funding Ratio: this ratio is intended to strengthen the longer-term resilience of banks through additional incentives meant to encourage banks to finance their operations using more structurally stable resources. This long-term structural liquidity ratio, applicable to a one-year period, was formulated to provide a viable structure for asset and liability maturities.
OH	*Obligations de financement de l'habitat*/Housing financing bond
BCP	Business Continuity Plan
PD	Probability of Default: the likelihood that a counterparty of the bank will default within a one-year period.
RMBS	See securitization
RSSI	*Responsable de la Sécurité des Systèmes d'Information*/Head of Information System Security
RWA	Risk-Weighted Assets. The calculation of credit risks is further refined using a more detailed risk weighting that incorporates counterparty default risk and debt default risk.
S&P	Standard & Poor's
SCF	Compagnie de Financement Foncier, the Group's covered bond issuer
SEC	US Securities and Exchange Commission
SFH	Housing Finance Company
IS	Information System

Acronyms

SREP	Supervisory Review and Evaluation Process: methodology for assessing and measuring the risks weighing on each bank. SREP gives the prudential authorities a set of harmonized tools to analyze a bank's risk profile from four different angles: business model, governance and risk management, risk to capital, and risk to liquidity and funding. The supervisor sends the bank the SREP decisions at the end of the process and sets key objectives. The bank must then "correct" these within a specific time.
SRM	Single Resolution Mechanism: an EU-level system to ensure an orderly resolution of non-viable banks with a minimal impact on taxpayers and the real economy. The SRM is one of the pillars of the European Banking Union and consists of an EU-level resolution authority (Single Resolution Board – SRB) and a common resolution fund financed by the banking sector (Single Resolution Fund – SRF).
SVaR	Stressed Value at Risk: the SVaR calculation method is identical to the VaR approach (historical or Monte Carlo method, scope – position, risk factors – choices and modeling – model approximations and numerical methods identical to those used for VaR) and involves a historical simulation (with "one-day" shocks) calculated over a one-year stressed period, at a 99% confidence level scaled up to ten days. The goal is to assess the impacts of stressed scenarios on the portfolio and current market levels.
T1/T2	Tier 1/Tier 2
TLAC	Total Loss Absorbing Capacity: a ratio applicable to G-SIBs that aims to ensure that each G-SIB has the capacity to continue its essential operations for the economy even after a loss has consumed all of its capital. In November 2015, the FSB published the final TLAC calibration: all TLAC-eligible instruments will have to be equivalent to at least 16% of risk-weighted assets at January 1, 2019 and at least 6% of the leverage ratio denominator. TLAC will subsequently have to be equivalent to 18% of risk-weighted assets and 6.75% of the leverage ratio denominator from January 1, 2022.
TRS	Total Return Swap, *i.e.* a transaction whereby two parties exchange the income generated and any change in value on two different assets over a given time period.
TSS	*Titres super subordonnés*/deeply subordinated notes, *i.e.* perpetual bonds with no contractual redemption commitment that pay interest in perpetuity. In the event of liquidation, they are repaid after other creditors (subordinated loans). These securities pay annual interest contingent on the payment of a dividend or the achievement of a specific result.
VaR	Value at Risk: a measurement of market risk on a bank's trading book expressed as a monetary value. It allows the entity performing the calculation to appraise the maximum losses liable to be incurred on its trading book. A statistical variable, VaR is always associated with a confidence interval (generally 95% or 99%) and a specific time frame (in practice, one day or ten days, as the trading positions involved are meant to be unwound within a few days).

Key technical terms

Netting agreement	A contract whereby two parties to a forward financial instrument (financial contract, securities loan or repurchase agreement) agree to settle their reciprocal claims under these contracts through a single consolidated net payment, particularly in the event of default or contract termination. A master netting agreement extends this mechanism to different transactions through one all-encompassing contract.
Equities	An equity security issued by a corporation, representing a certificate of ownership and entitling the holder (the "shareholder") to a proportional share in the distribution of any profits or net assets, as well as a voting right at the General Meeting.
Rating agency	An organization that specializes in assessing the creditworthiness of issuers of debt securities, *i.e.* their ability to honor their commitments (repayment of capital and interest within the contractual period).
Risk appetite	Level of risk, expressed through quantitative or qualitative criteria, by type of risk and business line, that the Group is prepared to accept given its strategy. The risk appetite exercise is one of the key strategic oversight tools available to the Group's management team.
Standardized approach	An approach used to determine capital requirements relative to credit risk, pursuant to Pillar I of Basel II. Under this approach, the risk weightings used when calculating capital requirements are determined by the regulator.
Basel II (the Basel Accords)	A supervisory framework aimed at better anticipating and limiting the risks borne by credit institutions. It focuses on banks' credit risk, market risk and operational risk. The terms drafted by the Basel Committee were adopted in Europe through a European directive and have been applicable in France since January 1, 2008.
Basel III (the Basel Accords)	Changes in banking prudential standards which incorporated the lessons of the financial crisis of 2007-2008. They complement the Basel II Accords by strengthening the quality and quantity of minimum own funds that institutions must hold. Basel III also establishes minimum requirements for liquidity risk management (quantitative ratios), defines measures aimed at limiting procyclicality in the financial system (capital buffers that vary according to the economic cycle) and reinforces requirements for financial institutions deemed to be systemically important.
"Bank acting as originator"	See securitization.
"Bank acting as sponsor"	See securitization.
"Bank acting as investor"	See securitization.
CRD IV/CRR	(See Acronyms) Directive No. 2013/36/EU (CRD IV) and regulation (EU) No. 575/2013 (CRR), which transpose Basel II in Europe. In conjunction with the EBA's (European Banking Authority) technical standards, they define European regulations for the capital, major risk, leverage and liquidity ratios.
Cost income ratio	A ratio indicating the portion of net banking income used to cover operating expenses (the company's operating costs). It is calculated by dividing operating costs by net banking income.
Collateral	A transferable asset or guarantee pledged to secure reimbursement on a loan in the event the borrower fails to meet its payment obligations.
Haircut	The percentage by which a security's market value is reduced to reflect its value in a stressed environment (counterparty risk or market stress).
Derivative	A financial security or financial contract whose value changes based on the value of an underlying asset, which may be either financial (equities, bonds, currencies, etc.) or non-financial (commodities, agricultural products, etc.) in nature. This change may coincide with a multiplier effect (leverage effect). Derivatives can take the form of either securities (warrants, certificates, structured EMTNs, etc.) or contracts (forwards, options, swaps, etc.). Exchange-traded derivative contracts are called futures.
Credit derivative	A financial product whose underlying asset is a credit obligation or debt security (bond). The purpose of the credit derivative is to transfer credit risk without transferring the asset itself for hedging purposes. One of the most common forms of credit derivatives is the credit default swap (CDS).
Senior non-preferred debt	Senior non-preferred debt is a category of securities, advances, instruments or rights introduced by directive (EU) No. 2017/2399 amending directive No. 2014/59/EU (BRRD) that, in the event of the insolvency of the credit institution, rank higher than the securities, advances, instruments or rights considered as subordinated, but lower than that of the other securities, advances, instruments or rights considered as senior (including preferred senior debt).
Senior Preferred	Preferred senior debt is a category of securities, advances, instruments or rights that, in the event of the insolvency of the credit institution, rank higher than other securities, advances, instruments or rights considered as senior and subordinated (including senior non-preferred debt).
Gross exposure	Exposure before the impact of provisions, adjustments and risk mitigation techniques.
Tier 1 capital	Core capital including the financial institution's consolidated shareholders' equity minus regulatory deductions.
Tier 2 capital	Supplementary capital mainly consisting of subordinated securities minus regulatory deduction.
Fair value	The price that would be received to sell an asset or paid to transfer a liability in a standard arm's length transaction between market participants at the valuation date. Fair value is therefore based on the exit price.
Liquidity	In a banking context, liquidity refers to a bank's ability to cover its short-term commitments. Liquidity also refers to the degree to which an asset can be quickly bought or sold on a market without a substantial reduction in value.
Rating	An appraisal by a financial rating agency (Fitch Ratings, Moody's, Standard & Poor's) of the creditworthiness of an issuer (company, government or other public entity) or a transaction (bond issue, securitization, covered bond). The rating has a direct impact on the cost of raising capital.
Bond	A portion of a loan issued in the form of an exchangeable security. For a given issue, a bond grants the same debt claims on the issuer for the same nominal value, the issuer being a company, a public sector entity or a government.

Key technical terms

Pillar I	Pillar I sets minimum requirements for capital. It aims to ensure that banking institutions hold sufficient capital to provide a minimum level of coverage for their credit risk, market risk and operational risk. The bank can use standardized or advanced methods to calculate its capital requirement.
Pillar II	Pillar II establishes a process of prudential supervision that complements and strengthens Pillar I. It consists of: • an analysis by the bank of all of its risks, including those already covered by Pillar I; • an estimate by the bank of the capital requirement for these risks; • a comparison by the banking supervisor of its own analysis of the bank's risk profile with the analysis conducted by the bank, in order to adapt its choice of prudential measures where applicable, which may take the form of capital requirements exceeding the minimum requirements or any other appropriate technique.
Pillar III	Pillar III is concerned with establishing market discipline through a series of reporting requirements. These requirements – both qualitative and quantitative – are intended to improve financial transparency in the assessment of exposure to risks, risk assessment procedures and capital adequacy.
Common Equity Tier 1 ratio	Ratio of Common Equity Tier 1 (CET1) capital to risk-weighted assets. The CET1 ratio is a solvency indicator used in the Basel III prudential accords.
Leverage ratio	Tier 1 capital divided by exposures, which consist of assets and off-balance sheet items, after restatements of derivatives, funding transactions and items deducted from capital. Its main goal is to serve as a supplementary risk measurement for capital requirements.
Total capital ratio	Ratio of total capital (Tier 1 and 2) to risk-weighted assets (RWAs).
Resecuritization	The securitization of an exposure that is already securitized where the risk associated with an underlying pool of exposures is tranched and at least one of the underlying exposures is a securitization position.
Credit and counterparty risk	The risk of loss from the inability of clients, issuers or other counterparties to honor their financial commitments. Credit risk includes counterparty risk related to market transactions and securitization.
Market risks	The risk of loss of value on financial instruments resulting from changes in market inputs, from the volatility of these inputs or from the correlations between these inputs.
Operational risk	Risks of losses or penalties due in particular to failures of internal procedures and systems, human error or external events.
Structural interest rate and foreign exchange risk	The risk of losses or impairment on assets arising from changes in interest rates or exchange rates. Structural interest rate and foreign exchange risks are associated with commercial activities and proprietary transactions.
Liquidity risk	The risk that a bank will be unable to honor its payment commitments as they fall due and replace funds when they are withdrawn.
Swap	An agreement between two counterparties to exchange different assets, or revenues from different assets, until a given date.
Securitization	A transaction whereby credit risk on loans and advances is transferred to investors by an entity through the issuance of negotiable securities. This may involve the transfer of advances (physical securitization) or the transfer of risks only (credit derivatives). Some securitization transactions are subordinated through the creation of tranches: • ABS – Asset-Backed Securities, *i.e.* instruments representing a pool of financial assets (excluding mortgage loans), whose performance is linked to that of the underlying asset or pool of assets; • CDOs – Collateralized Debt Obligations, *i.e.* debt securities backed by a pool of assets which can be either bank loans (mortgages) or corporate bonds. Interest and principal payments may be subject to subordination (*i.e.* through the creation of tranches); • –LOs – Collateralized Loan Obligations, *i.e.* credit derivatives backed by a homogeneous pool of commercial loans; • CMBS – Commercial Mortgage-Backed Securities; • RMBS – Residential Mortgage-Backed Securities, *i.e.* debt securities backed by a pool of assets consisting of residential mortgage loans; • Bank acting as originator: the securitization exposures are the retained positions, even where not eligible for the securitization framework due to the absence of significant and effective risk transfer; • Bank acting as investor: investment positions purchased in third-party deals; • Bank acting as sponsor: a bank is considered a "sponsor" if it, in fact or in substance, manages or advises the program, places securities into the market, or provides liquidity and/or credit enhancements. The program may include, for example, asset-backed commercial paper (ABCP) conduit programs and structured investment vehicles. The securitization exposures include exposures to ABCP conduits to which the bank provides program-wide enhancements, liquidity and other facilities.
Net value	Total gross value less allowances/impairments.
Volatility	A measurement of the magnitude of an asset's price fluctuation and thus a measurement of its risk. Volatility corresponds to the standard deviation of the asset's immediate returns over a given period.

Other terms

Back office	Support or back office department, in charge of administrative functions at a financial intermediary.
Backtesting	Method consisting of verifying that the actual result rarely exceeds the VaR (Value at Risk) loss.
Bail-in	Tool to limit any assistance from public funds to a troubled institution that is still in operation or in the process of liquidation. The bail-in grants to the prudential supervisory authorities the power to impose on certain creditors of a credit institution that may have solvency problems, the conversion of their receivables into shares of this institution and/or the reduction of the amount of these receivables. The European agreement of June 26, 2015 provides for priority requests, in the event of insufficient equity (following losses), from creditors holding subordinated debt, then senior creditors, then unsecured deposits of large companies, then those of SMEs and finally those of individuals above €100,000. However, guaranteed deposits, covered bonds, employee compensation, liabilities related to the institution's vital activities and interbank liabilities with a maturity of less than seven days must not be affected.
Broker	Broker
Brokerage	Brokerage
Co-lead	Co-lead
Commodities	Commodities
Corporate	Corporate
Coverage	Hedging (in the sense of customer follow-up)
Covered bonds	Covered or collateralized bond: bond for which the repayment and payment of interest are ensured by income flows from a portfolio of high-quality assets that serves as collateral, often a portfolio of mortgages, and the issuing institution is often the manager of the payment of flows to investors (obligations foncières in France, Pfandbriefe in Germany).
Datacenter	Datacenter
Equity (tranche)	In a securitization arrangement, refers to the tranche that bears the first losses due to defaults in the underlying portfolio.
Fully-loaded	Expresses full compliance with the Basel III solvency requirements (which became mandatory in 2019).
Front office	Customer service (team of market operators)
Hedge funds	Alternative management funds: speculative investment funds that aim for an absolute return and have a great deal of freedom in their management.
Holding	Parent company
Investment grade	Long-term rating provided by an external agency ranging from AAA/Aaa to BBB-/Baa3 of a counterparty or underlying issue. A rating equal to or lower than BB+/Ba1 qualifies the instrument as non-investment grade.
Joint venture	Joint venture
Loss ratio	Ratio between claims/premiums collected
Mark-to-market	A method that consists of regularly or even continuously valuing a position on the basis of its market value at the time of the valuation.
Mark-to-model	Method which consists of valuing a position on the basis of a financial model and therefore assumptions made by the valuer.
Monoline	Companies that provide credit enhancement to financial market participants.
New Deal	Strategic plan implemented by Natixis.
Phase-in	Refers to compliance with current solvency requirements, taking into account the transitional period for the implementation of Basel III.
Reporting	Reporting
Spread	Actuarial margin: difference between the actuarial rate of return of a bond and that of a risk-free loan of identical duration.
Trading	Trading
Watchlist	Watchlist

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